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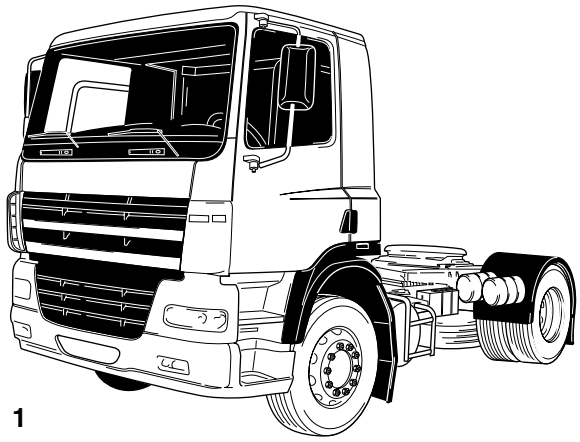
1. INTERNAL AND EXTERNAL CAB COMPONENTS

1.1 GENERAL



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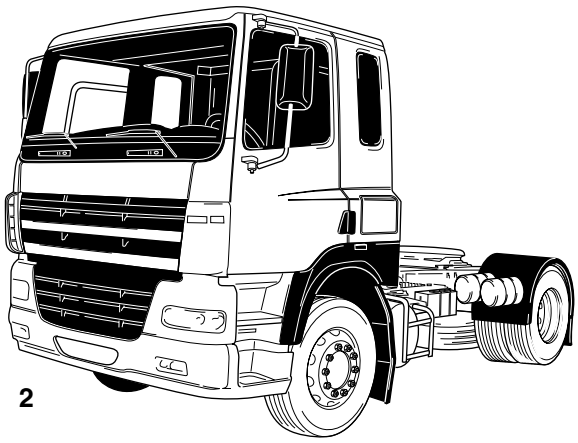

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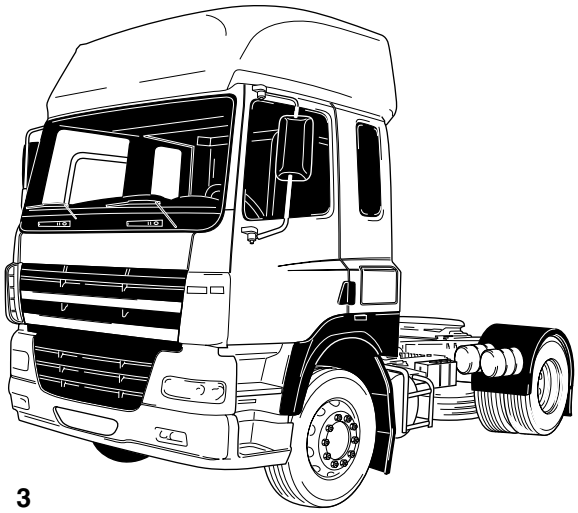

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K1 01 008

Legend
1. Day cab
2. Sleeper cab
3. High sleeper cab

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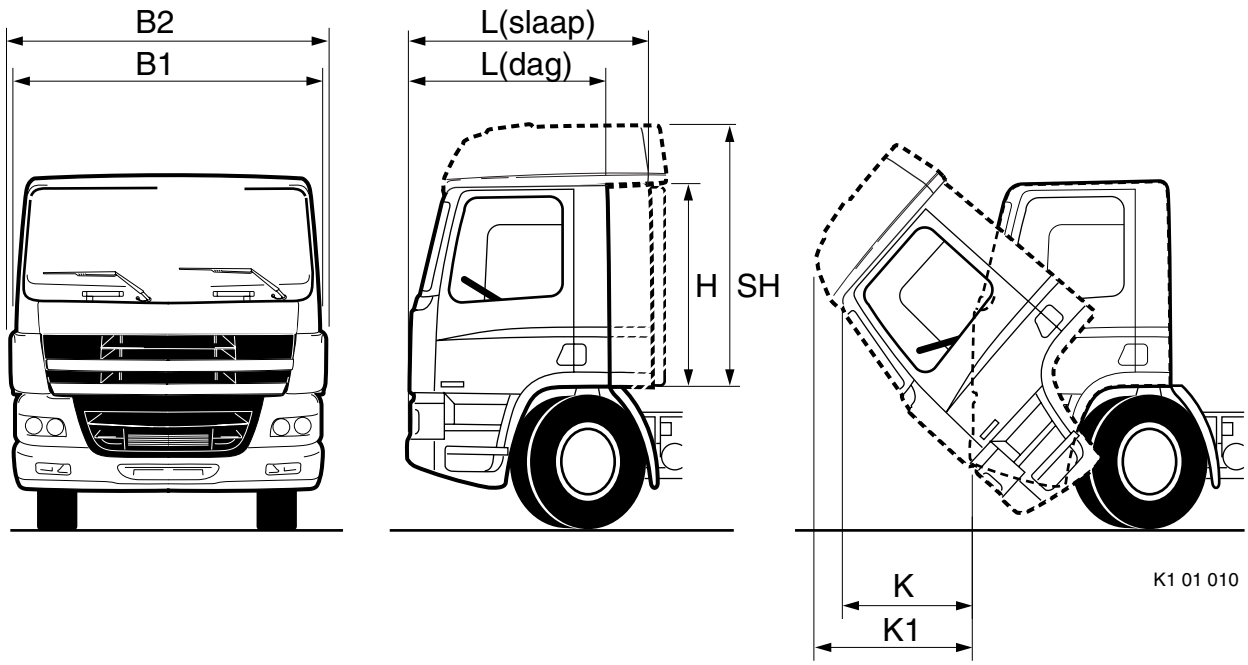
Main dimensions and weights



Cab dimensions in mm:	Day cab (D)	Sleeper cab (SL)	High sleeper cab (SH)
length (L)	1760	2190	2190
width (B1)	2300	2300	2300
width (B2)	2490	2490	2490
max. height (H)	1730	1703	
height (SH)			2400
tilting (K)	1290 (1)	1290 (1)	
tilting (K1)			1690 (1)

Cab weights

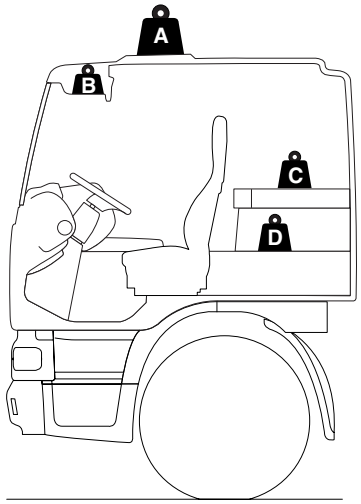
day cab (D)	820 (2)
sleeper cab (SL)	965 (2)
high sleeper cab (SH)	1085 (2)

(1) Dimensions (K) and (K1) measured from the front of the bumper
(2) Cab weights for fully equipped cabs, including windscreen washer reservoir but excluding suspension

0

Permissible cab weights, day and sleeper cab

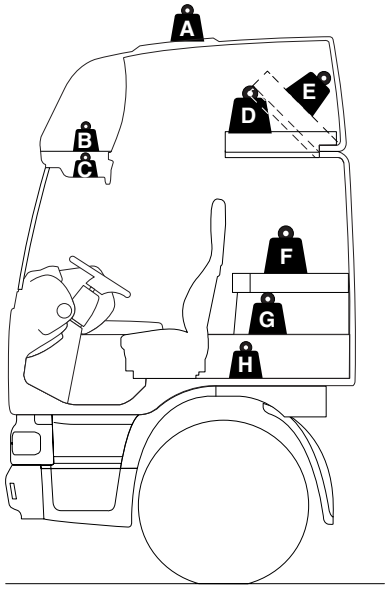
Item	Description	Max. load
A	Roof loading above	150 kg
B	Roof console	15 kg
C	Bunk	100 kg
D	Under bunk storage box	50 kg



K1 00 997

Permissible cab weights, high sleeper:

Item	Description	Max. load
A	Roof loading above	40 kg
B	Roof console	20 kg
C	Below roof console	15 kg
D	Upper bunk	100 kg
E	Upper bunk (folded away)	50 kg
F	Bunk	100 kg
G	Under bunk storage box	50 kg
H	Tool storage	2 x 25 kg



K1 00 998

Cab side members
Welding on cab side members is **NOT** permitted.

When repairing the cab side member, you must use sheet-metal trimming panels.
These must be fitted by spot welding.

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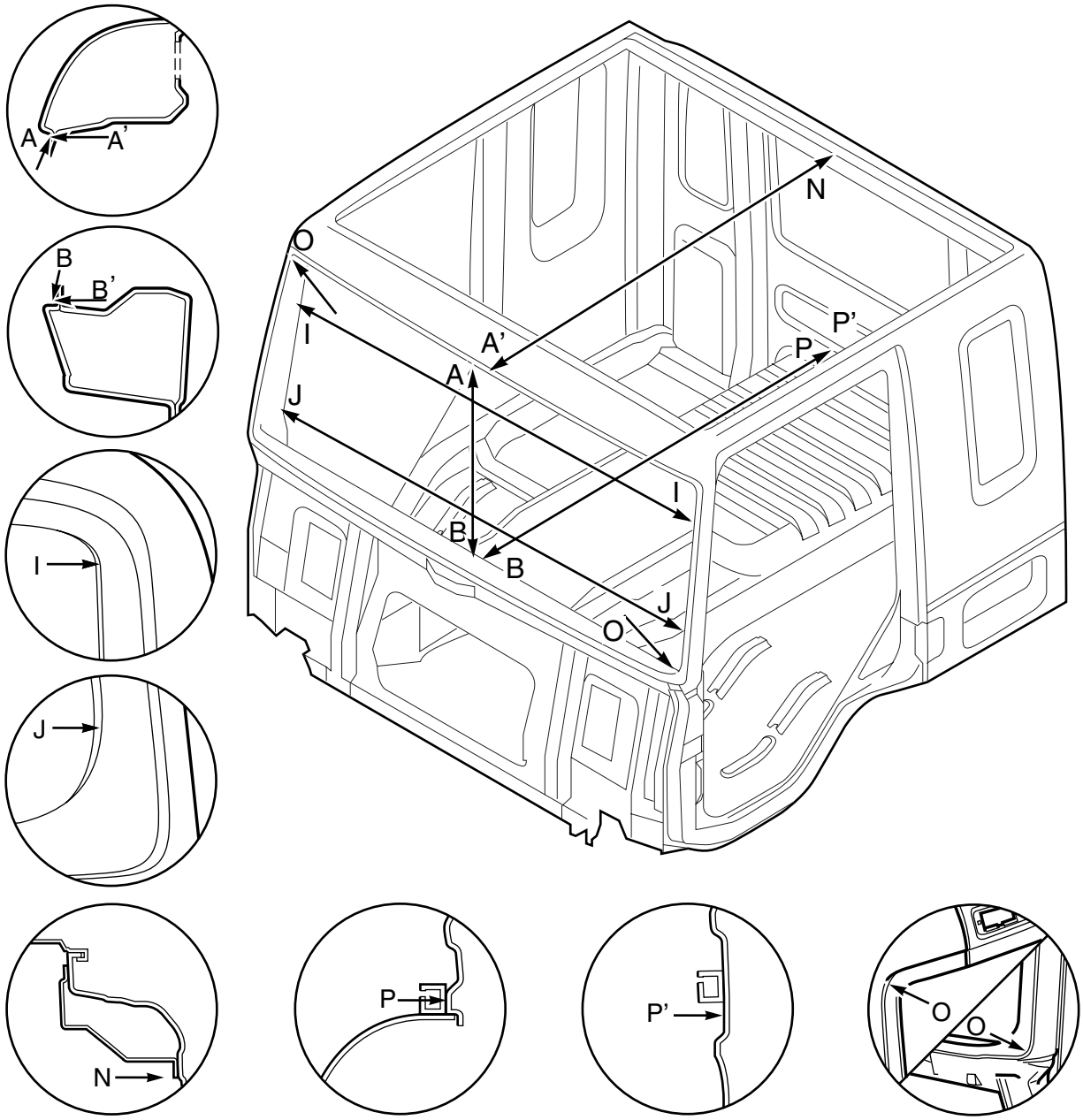
Recommended dimensions



K1 01 645

Recommended dimension between measuring points on the same side.

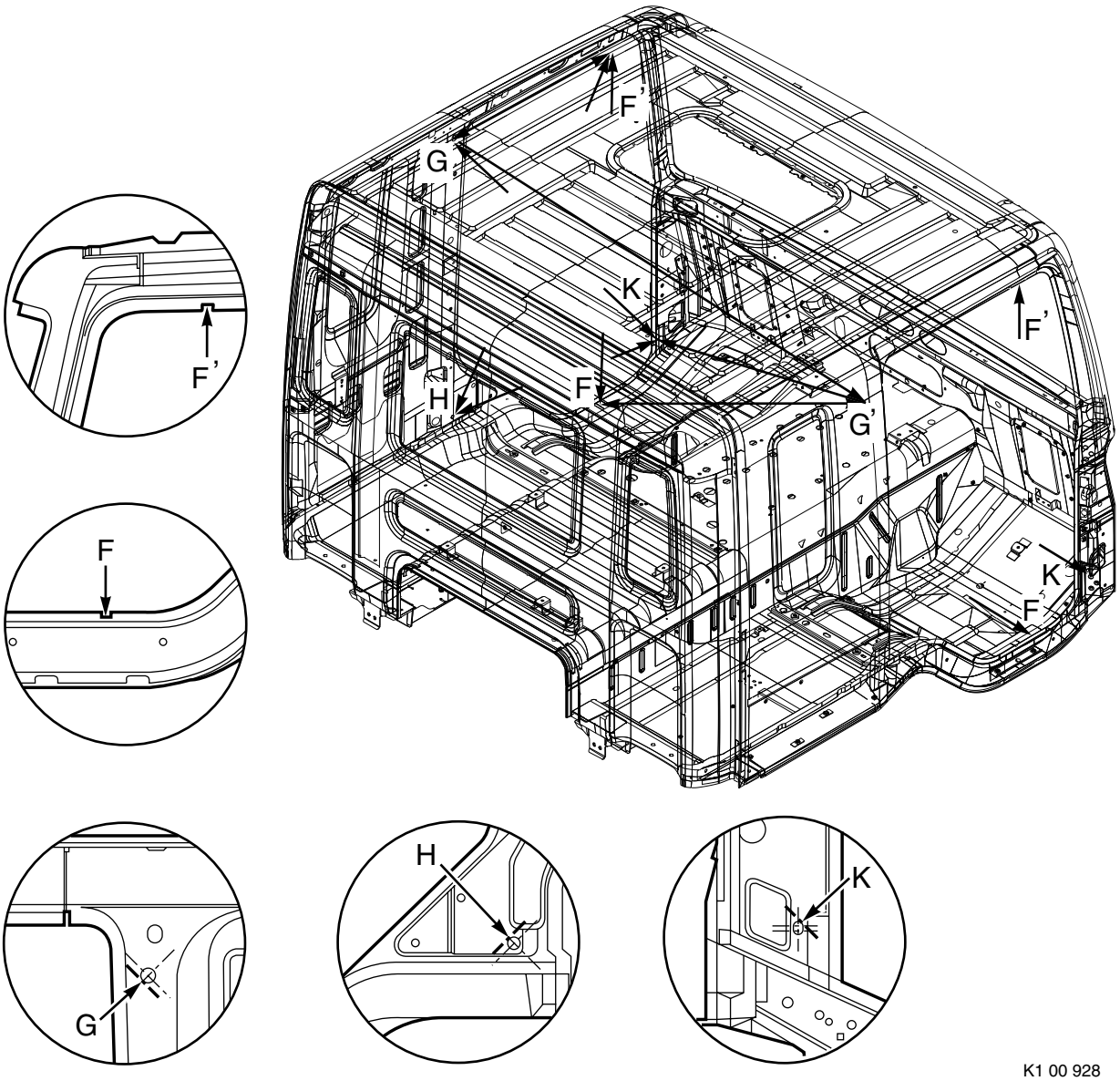
A - B	818 mm
I - I	2070 mm
J - J	2185 mm
O - O	2247 mm

Recommended dimension between measuring points on opposite sides.

	Short cab	Long cab
A' - N	1367 mm	1797 mm
B' - P	1660 mm (1)	
B' - P'		2110 mm (2)

(1) Measurement area between the brackets
(2) Measurement area under the bracket

0



K1 00 928

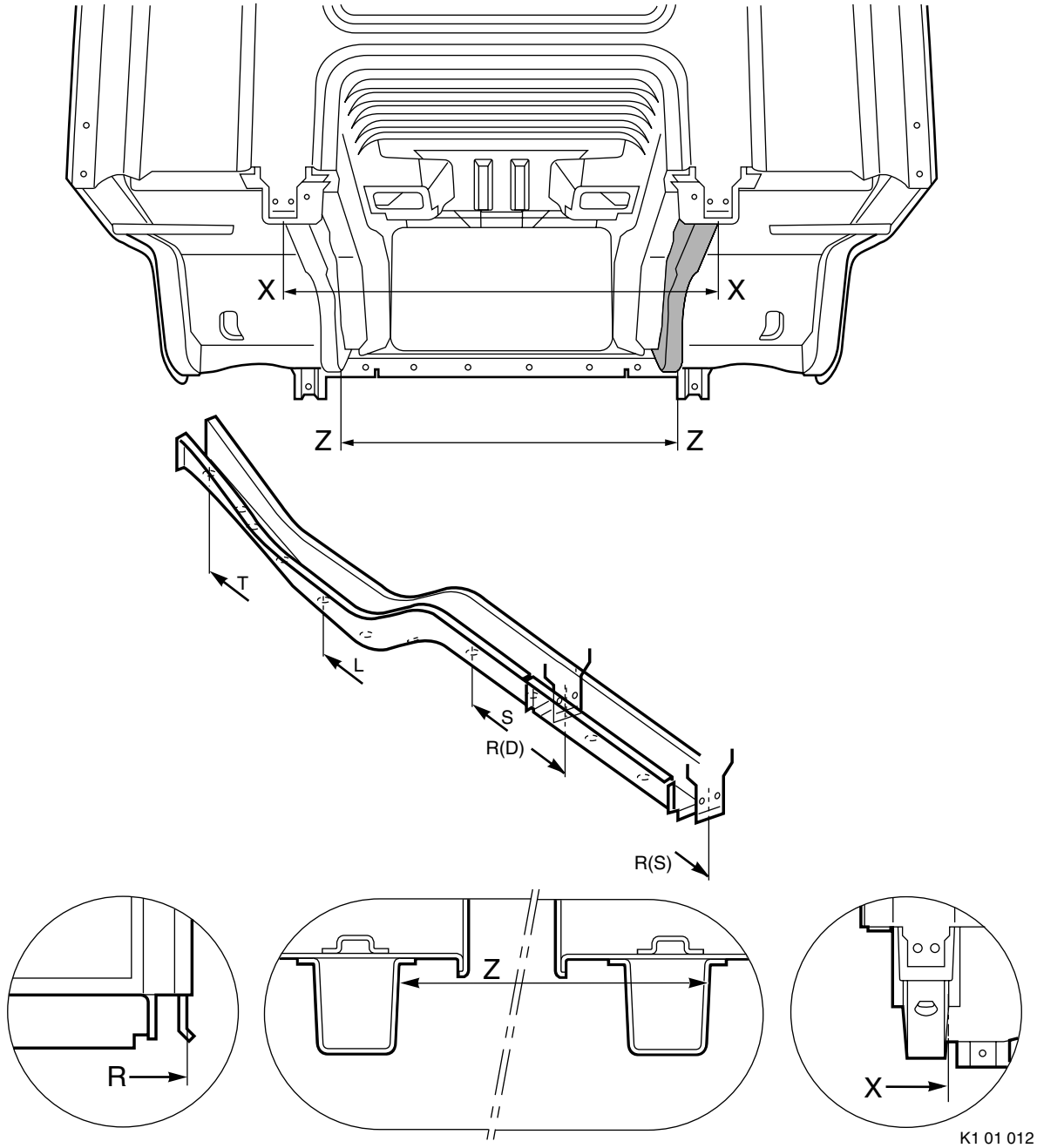
Recommended dimension between measuring points on the same side.

F - F'	1524 mm
F' - H	1419 mm
G - K	1662 mm
F' - G	708 mm

Recommended dimension between measuring points on opposite sides.

G' - G	2030 mm
G - F	2612 mm
G - K	2649 mm

0



X - X	1175 mm	
Z - Z	1080 mm	
	R(D) (short cab)	R(S) (long cab)
L - R	1176 mm	1606 mm
S - R	621 mm	1051 mm
T - R	1604 mm	2034 mm

Windscreens

Setting times for windscreen adhesive				
Product name	**Vehicle mobile in workshop after:**	**Cab can be tilted after:**	**Vehicle usable after:**	**DAF number**
Sikaflex 255 FC	6 hours	8 hours	12 hours	1271129
Sika Tack Ultrafast	2 hours	4 hours	6 hours	1241020
Sika Tack plus booster	1 hour	1 hour	2 hours	1357925

A relative humidity of less than 50% delays setting, as does a temperature lower than 20°C.

Products applied for bonded windscreens			
Product name	**Properties**	**Applications**	**DAF number**
Sikaflex 255 FC	Application time 20 min.	Adhesive (cold process) for bonding windscreens	1271129
Sika Tack Ultrafast	Application time 10 min.	Adhesive (warm process) for bonding windscreens	1241020
Sika Tack plus booster	Application time 5 min.	Adhesive (warm process) for bonding windscreens	1357925
Sika Aktivator	Minimum drying time 5 min.	Cleaning and activating the glass and the frame.	1312362
Sika remover 208		Removal of adhesive which has not yet set. Do not use on surfaces to be bonded.	1241019

High sleeper cab

Products for gluing high sleeper cab			
Product name	**Properties**	**Applications**	**DAF number**
Scotch brite very fine A (red)		Abrasive	1387923
Sika Cleaner	Minimum drying time 5 min.	Cleaning surface of raised roof	1240548
Sika Primer 209	Minimum drying time 15 min. Maximum drying time 24 hours	Application to raised roof	1240547
Sika Activator	Minimum drying time 5 min.	Cleaning and activating the cab roof edge to be glued	1312362
Sikaflex 252 (white)	Application time within 10 min. Setting time 2 days	Gluing raised roof on cab	1286578

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Windscreen wiper motor

Fitting new rods	Fina Ceran grease
Motor speed 1	35 rpm
Motor speed 2	50 rpm

Heater fan

Fan setting	series resistors
1	R1 + R2 + R3
2	R2 + R3
3	R3
4	no series resistors

Resistor rating:

R1	4.2 Ω ± 0.15 %
R2	1.4 Ω ± 0.15 %
R3	2.2 Ω ± 0.15 %

Heater control

Heater valve	black
Defroster valve LHD	red
Defroster valve RHD	blue
Foot valve LHD	green
Foot valve RHD	brown

Doors

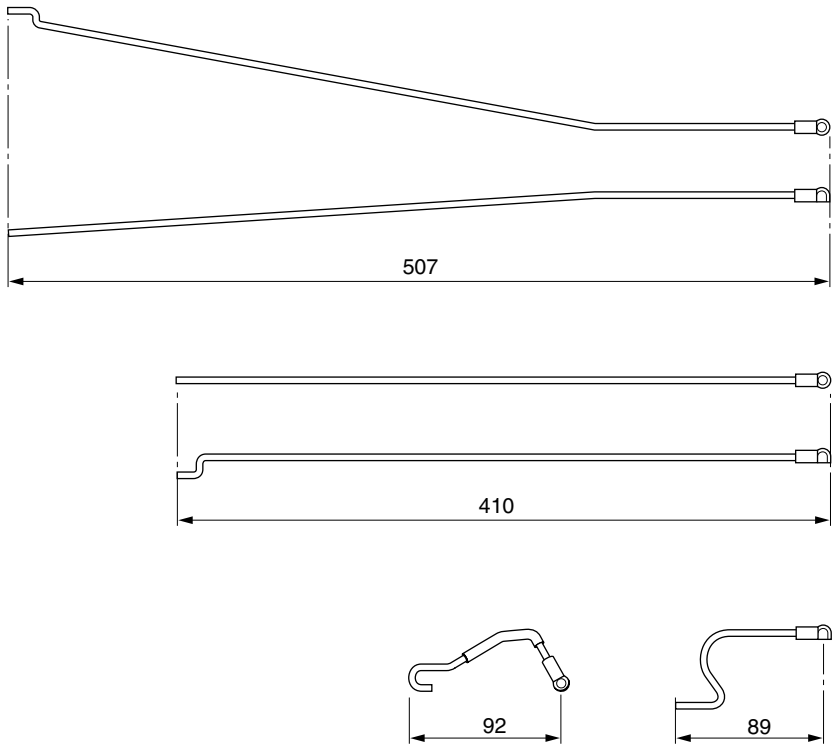
Products for gluing anti-whistle weatherstrip			
Product name	**Properties**	**Applications**	**DAF number**
Scotch brite very fine A (red)		Abrasive	1387923
Sika Cleaner	Minimum drying time 5 min.	Cleaning door edge	1240548
Loctite 401 (superfast adhesive)	**Dries within a few seconds** Setting time 12 hours	Securing anti-whistle weatherstrip to door edge	0632192

Adjustment dimensions:

Entire perimeter (except the lower edge)	8 mm clearance
Bottom	11 mm clearance
Frame depth	0.5 mm within the cab to 1.5 mm outside the cab

0

Adjustment dimensions of door lock rods



K1 01 023

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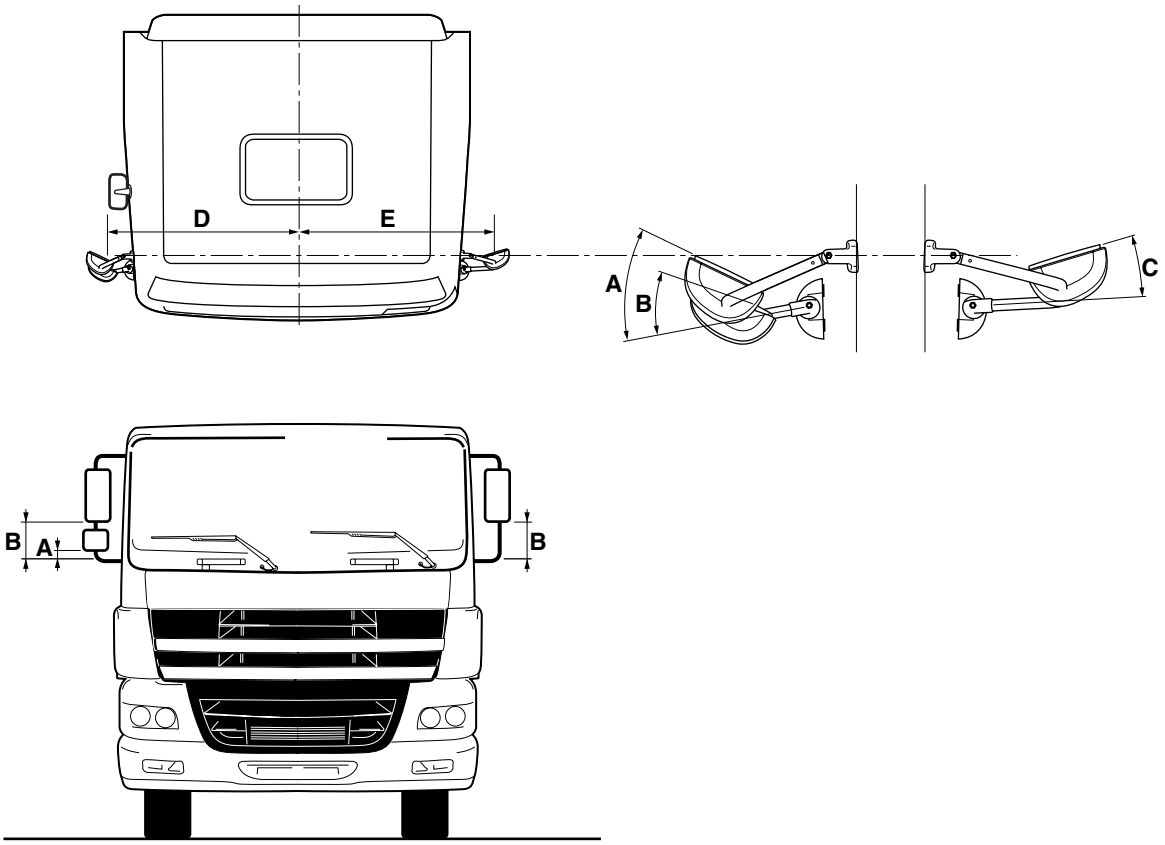
Adjustment dimensions of mirrors without dead angle exterior mirror

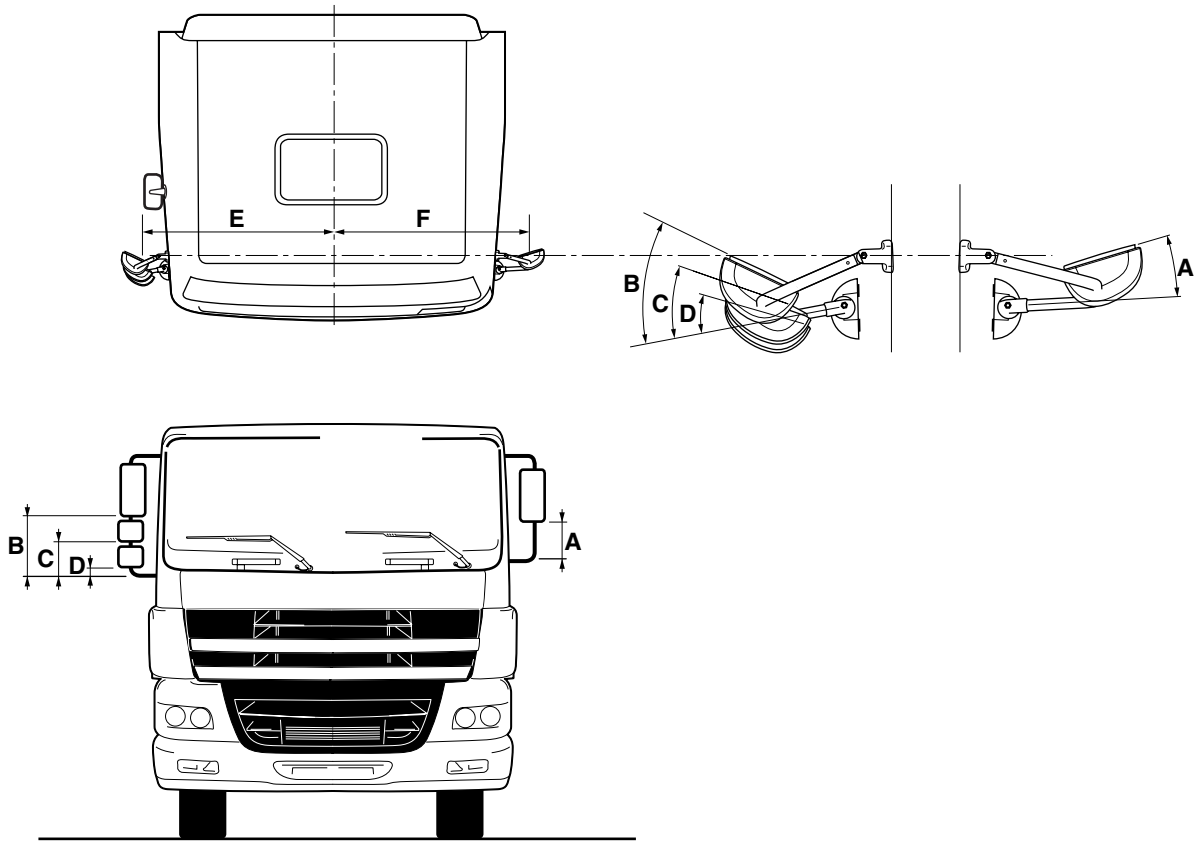


K1 01 027

Size	Normal (mm)	Normal adjustment angle
A	114	45°
B	326	36°
C		9°
D (main mirror)	1374	
E	1406	

0

Adjustment dimensions of mirrors with dead angle exterior mirror



K1 01 333

Size	Normal (mm)	Normal adjustment angle
A	326	9°
B	396	45°
C	219	35°
D	47	31°
E (main mirror)	1379	
F	1406	

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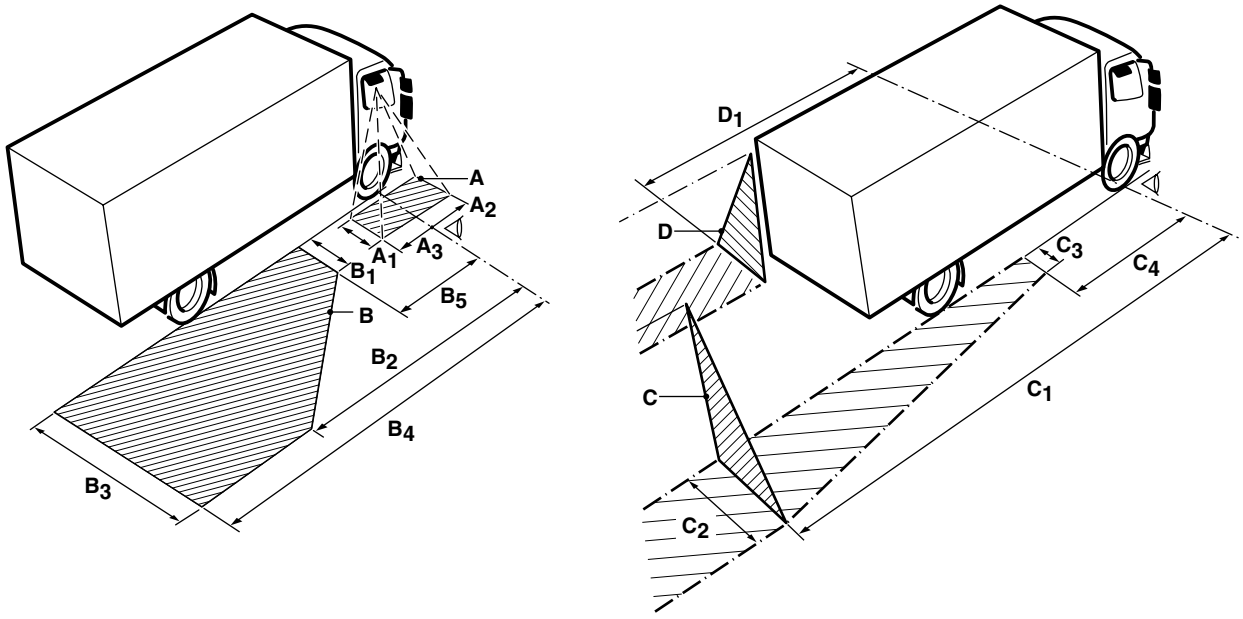
Dimensions of compulsory field of vision



K100237

Mirror	size 1	size 2	size 3	size 4	size 5
Pavement mirror [A]	1 m	1 m	1.25 m		
Wide-angle exterior mirror [B]	2.5 m	15 m	12.5 m	25 m	3 m
Main exterior mirror, co-driver side [C]	30 m	3.5 m	0.75 m	4 m	
Main exterior mirror, driver side [D]	10 m	2.5 m			

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1.2 TIGHTENING TORQUES

The tightening torques specified in this section are different from the standard tightening torques cited in the overview of the standard tightening torques. The other threaded connections not specified must therefore be tightened to the torque cited in the overview of standard tightening torques.

When attachment bolts and nuts are replaced, it is important that - unless stated otherwise - these bolts and nuts are of exactly the same length and property class as those removed.

Windscreen wiper motor	
Attachment on bulkhead	20 - 25 Nm
Motor shaft nut	40 - 50 Nm
Windscreen wiper arm nut	16 - 20 Nm
Roof hatch	
Fixing bolts for roof hatch edging	10 Nm
Clutch pedal	
Sealant for end of clutch pedal spindle	silicone sealant
Locking bolt	according to standard (1)

(1) Use Loctite 243 to secure

Engine brake switch	
Sealant for bolts	silicone sealant
Steering column	
Attachment bolt for steering shaft universal joint	54 Nm (1)
Attachments nuts at underside of steering column	23 Nm
Steering wheel attachment nut	65 Nm

(1) Always replace the attachment bolt and nut

Doors	
Striker plate Torx screws	23 Nm
Exterior mirrors	
Lower pivoting point of D-shaped support, M8 nut	32 Nm
Pavement mirror adjusting nut	7.0 - 8.1 Nm
Raised roof	
Attachment bolts for raised roof frame	30 Nm

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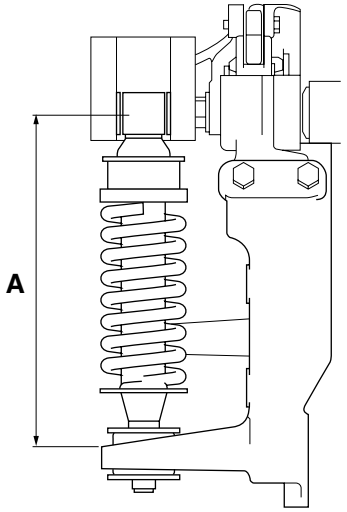
2. CAB SUSPENSION

2.1 GENERAL

The F230 cab is mounted to the chassis at four points with adjustable coil spring/air suspension elements. These have integral shock absorbers.

Adjusting the coil spring elements:

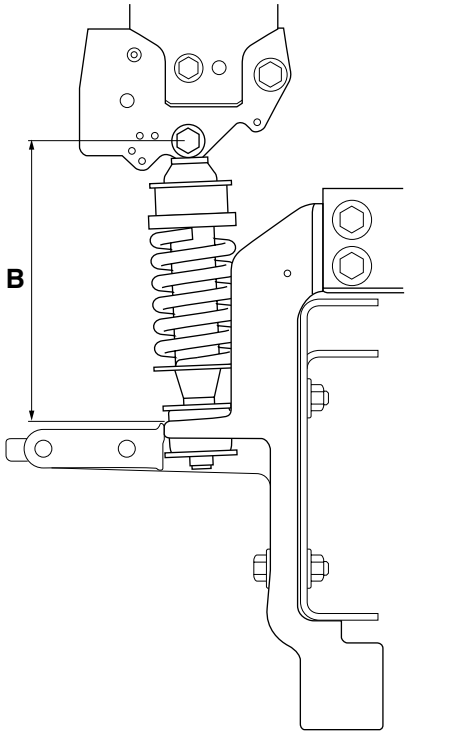
Front (size A) 318 ± 5 mm



K1 01 013

Rear (size B) 272 ± 5 mm

The sizes given above are from the top centre to the support of the spring element (top).
The spring elements can be adjusted in 4 steps of 3 mm.



K1 01 014

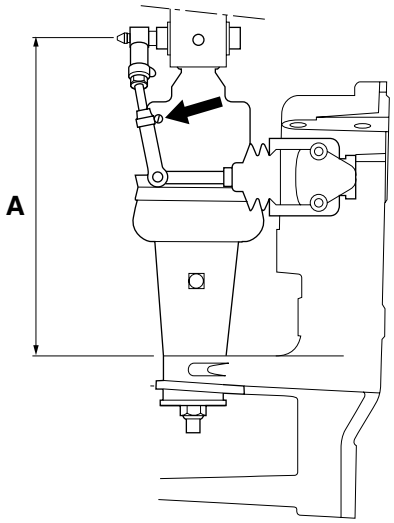
Spring distance of the coil spring elements:

front	approx. 80 mm (+40/-40)
rear	approx. 60 mm (+30/-30)

0

Adjusting the air suspension elements:

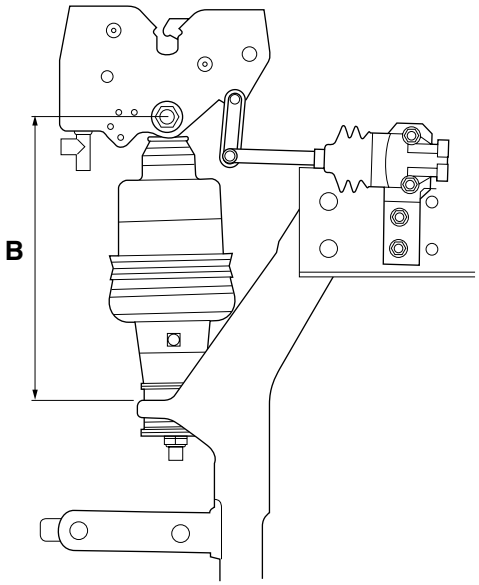
Front (size A) 318 ± 5 mm



K1 01 413

Rear (size B) 272 ± 5 mm

The sizes given above are from the top centre to the support of the spring element (top).



K1 01 000

Spring distance of the air suspension elements:

front	approx. 80 mm (+40/-40)
rear	approx. 60 mm (+30/-30)

The cab height can be adjusted at the front.

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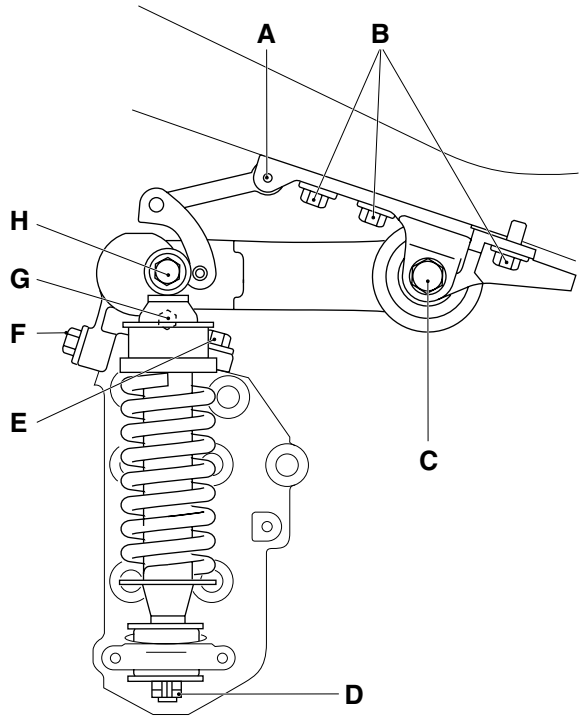
2.2 TIGHTENING TORQUES

The tightening torques specified in this section are different from the standard tightening torques cited in the overview of the standard tightening torques. The other threaded connections not specified must therefore be tightened to the torque cited in the overview of standard tightening torques.

When attachment bolts and nuts are replaced, it is important that - unless stated otherwise - these bolts and nuts are of exactly the same length and property class as those removed.

Cab suspension front



K1 01 077

A	M8 attachment bolt for tilt assist mechanism/ cab support	24 Nm (1)
B	M14 cab support bolt	170 Nm
C	M18 locating bolt for cab stabiliser vibration damper	235 Nm (2)
D	M14 nut for underside of spring (coil spring and air suspension)	50 Nm
E	M14 rearmost bolt for cab stabiliser bearing support (left/right)	170 Nm
F	M14 foremost bolt for cab stabiliser bearing support (left and right)	170 Nm
G	M8 prestressed bolt for cab stabiliser bearing support	35 Nm
H	M14 attachment bolt for top of spring (coil spring and air suspension)	170 Nm

(1) Use Loctite 243 to secure
(2) Use Loctite 243 to secure and tighten with cab in **fully** tilted position.

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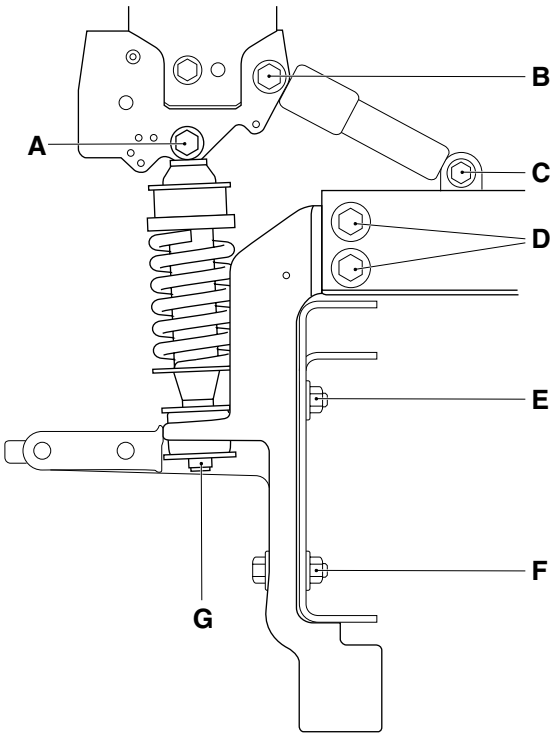
Rear cab suspension



K1 01 078

A	M14 attachment bolt for top of spring (coil spring and air suspension)	170 Nm
B	M14 attachment bolt for horizontal damper	170 Nm
C	M14 attachment bolt for horizontal damper	170 Nm
D	M16 attachment bolts for chassis support	300 - 450 Nm
E	M12 attachment bolt for chassis	110 Nm
F	M14 attachment bolt for chassis	170 Nm
G	M14 attachment bolt for day cab spring element	170 Nm
	M14 attachment nut for sleeper cab spring element	50 Nm

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3. CAB TILTING MECHANISM

3.1 GENERAL

Lifting cylinder

Nominal pressure	400 bar

Cab tilting pump

Nominal pressure	400 bar
Displacement	4 cm^3
Pressure limiting valve	400 + 50 bar
Pressure relief valve, level check/filler plug	2.5 bar

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3.2 TIGHTENING TORQUES

The tightening torques specified in this section are different from the standard tightening torques cited in the overview of the standard tightening torques. The other threaded connections not specified must therefore be tightened to the torque cited in the overview of standard tightening torques.

When attachment bolts and nuts are replaced, it is important that - unless stated otherwise - these bolts and nuts are of exactly the same length and property class as those removed.

Lifting cylinder

Lifting cylinder attachment bolt on cab	170 Nm
Lifting cylinder attachment bolt on chassis	60 Nm
Non-return valve seat	40 - 45 Nm

3.3 FILLING CAPACITIES

Cab tilting pump

Capacity of reservoir	480 cm^3

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4. SEATS

4.1 TIGHTENING TORQUES

The tightening torques specified in this section are different from the standard tightening torques cited in the overview of the standard tightening torques. The other threaded connections not specified must therefore be tightened to the torque cited in the overview of standard tightening torques.

When attachment bolts and nuts are replaced, it is important that - unless stated otherwise - these bolts and nuts are of exactly the same length and property class as those removed.

Seats

Seat attachment bolts M8	20 - 25 Nm
Attachment of seat belt mechanism 7/16", UNF-2B	30 - 40 Nm

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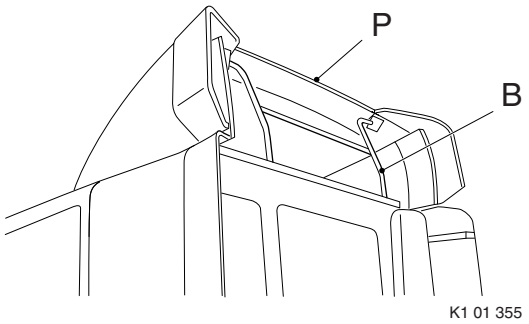
5. ACCESSORIES

5.1 GENERAL

The roof spoiler height of the 'aerodynamic' roof spoiler can be adjusted with the adjusting mechanism (B).



Roof spoiler setting range [mm]

	basic	aerodynamic
Day cab	525 - 775	760 - 1040
Sleeper Cab	525 - 775	760 - 1060
High sleeper cab	N/A	215 - 775

Note:
The size stated in the table represents the distance measured between the highest roof spoiler edge (P) and the cab roof plate local to the vehicle centreline.

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1. CAB HEATING

1.1 FAULT FINDING TABLE, CAB HEATING

SYMPTOM: CAB TEMPERATURE TOO HIGH	
Possible cause	**Remedy**
Heater valve cannot be fully closed.	Check the setting of the heater valve.

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2. CAB SUSPENSION

2.1 FAULT-FINDING TABLE, CAB SUSPENSION

Air-sprung cab

SYMPTOM: SUSPENSION TOUCHES BUMP STOP	
Possible cause	**Remedy**
Incorrectly adjusted suspension.	Check setting.
Leaking spring element.	Replace spring element.
Defective height control valve.	Replace height control valve and adjust suspension.
Defective valve.	Replace valve.

SYMPTOM: INSUFFICIENT LATERAL DAMPING	
Possible cause	**Remedy**
Worn or damaged horizontal dampers at the rear of the cab.	Replace both dampers.
Worn or damaged silentblocks in front cab suspension.	Replace both silentblocks.

SYMPTOM: AIR LEAKAGE	
Possible cause	**Remedy**
Damaged air bellows.	Replace air bellows.
Leakage in line connections.	Check line connections.
Internal leakage of height control valve.	Replace height control valve.

2.2 FAULT-FINDING TABLE, CAB TILTING MECHANISM

SYMPTOM: TILTING CYLINDER FAILS TO RESPOND	
Possible cause	**Remedy**
Damaged or broken pipe.	Replace pipe or connection.
Pump reservoir empty.	Top up reservoir and check for leaks.
Worn or damaged cylinder seal.	Replace the cylinder or fit a reconditioning set.

SYMPTOM: PUMP ROD REBOUNDS	
Possible cause	**Remedy**
Return stroke leakage.	Replace the tilting pump.

SYMPTOM: PUMP ONLY FUNCTIONS IN THE LAST PART OF THE STROKE	
Possible cause	**Remedy**
Low oil level in oil reservoir.	Top up oil reservoir.
Leaking inlet valve (ball).	Remove the two-way valve and check the inlet valve. Clean it or fit a reconditioning set.
Polluted inlet strainer.	Clean reservoir and strainer.

SYMPTOM: PUMP OPERATES WITH DIFFICULTY, CYLINDER DOES NOT RESPOND	
Possible cause	**Remedy**
Two-way valve incorrectly fitted after repair.	Remove the notched pin from the two-way valve and turn it 180°. Refit the notched pin in the two-way valve.

SYMPTOM: PUMP FAILS TO GENERATE PRESSURE	
Possible cause	**Remedy**
Reservoir level too low.	Top up the reservoir.
Leaking inlet valve (ball).	Remove the two-way valve and check the inlet valve. Clean it or fit a reconditioning set.
Worn or damaged O-rings on the two-way valve.	Fit a reconditioning set.
Pressure limiting valve incorrectly set.	Check the pressure limiting valve (using a pressure gauge only) and adjust, if necessary.

SYMPTOM: CAB LOCK CANNOT BE OPENED	
Possible cause	**Remedy**
Damaged or broken pipe.	Replace pipe or connection.
Jammed piston in locking mechanism.	Repair or replace the locking mechanism.

SYMPTOM: CAB CANNOT BE TILTED	
Possible cause	**Remedy**
Jammed piston in cab locking mechanism.	Repair or replace the locking mechanism.
Pump fails to generate pressure.	Check the operation of the pump.

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3. SEATS

3.1 FAULT-FINDING TABLE, ISRINGHAUSEN 6800 SERIES

SYMPTOM: SEAT FAILS TO RISE	
Possible cause	**Remedy**
Insufficient system pressure.	Check air supply to the seat.
Blocked bleeding system.	Check bleeding system.
The level control valve pins do not touch the running surface of the control discs.	Place seat in its highest position.

SYMPTOM: SEAT MOVES UP AND DOWN INDEPENDENTLY (LOADED)	
Possible cause	**Remedy**
Leaking pneumatic system	Check level control valve, air suspension and air pipes for leakage. Replace components or repair air pipe.
Cylinder in control disc unit fails to return to the original position.	Loosen cylinder attachment screws and tighten slightly (2 Nm).
Not a functioning fault, but excessive resistance in the system itself.	

SYMPTOM: SEAT HEIGHT CANNOT BE ADJUSTED FOR HEIGHT	
Possible cause	**Remedy**
Adjustment cylinder does not move.	During upward operation of the height control valve, check whether the pipe (16) blows off and during downward operation, whether the pipe (16, 17) blows off. If so, replace the adjustment cylinder.
Defective height adjustment valve (E).	Detach air pipes (9) and (11) from valve (D). Check whether air is blown off during operation. If not, check whether the control button is controlling the valve. Replace the valve or control button (depending on the fault).
Defective switch valve (C).	Disconnect air pipes (5) and (6) and operate height control up and down. If air escapes from the pipes (5) and (6), replace the valve (C).

SYMPTOM: SEAT MOVES TO TOP-MOST POSITION AND IS NOT SPRUNG	
Possible cause	**Remedy**
Air connections not installed according to diagram.	Correct the incorrect connection(s).

SYMPTOM: BLOWS OFF CONTINUOUSLY AND IS PERMANENTLY IN TOP POSITION	
Possible cause	**Remedy**
Air connections not installed according to diagram.	Correct the incorrect connection(s).

SYMPTOM: SEAT FUNCTIONS BUT CANNOT MOVE DOWN	
Possible cause	**Remedy**
Kinks in air pipe.	Check the air pipes for kinks.

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2

© 200346

1. SAFETY INSTRUCTIONS

1.1 SAFETY INSTRUCTIONS

A short-circuit can occur when removing the steel floor plate on the co-driver side. Therefore when working on the floor plate, disconnect the earth cable from the battery terminal.

You can stop the cab tilting forward at any time by turning the cock to the reverse tilting position.

If the vehicle has been involved in a collision, the cab must under no circumstances be tilted without due precautions. The internal mechanism of the lifting cylinder may have been damaged to such an extent that the cylinder is no longer locked by the internal stop collar. In that case there is a danger of the cab no longer being held back and falling forward to the ground.

2

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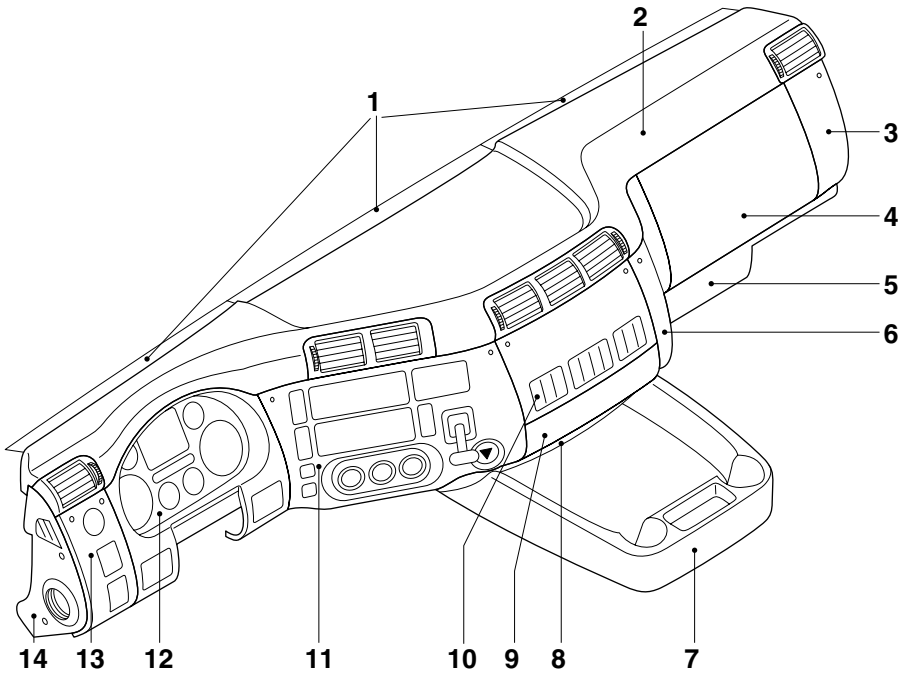
2. GENERAL

2.1 OVERVIEW DRAWING, INTERIOR CAB COMPONENTS



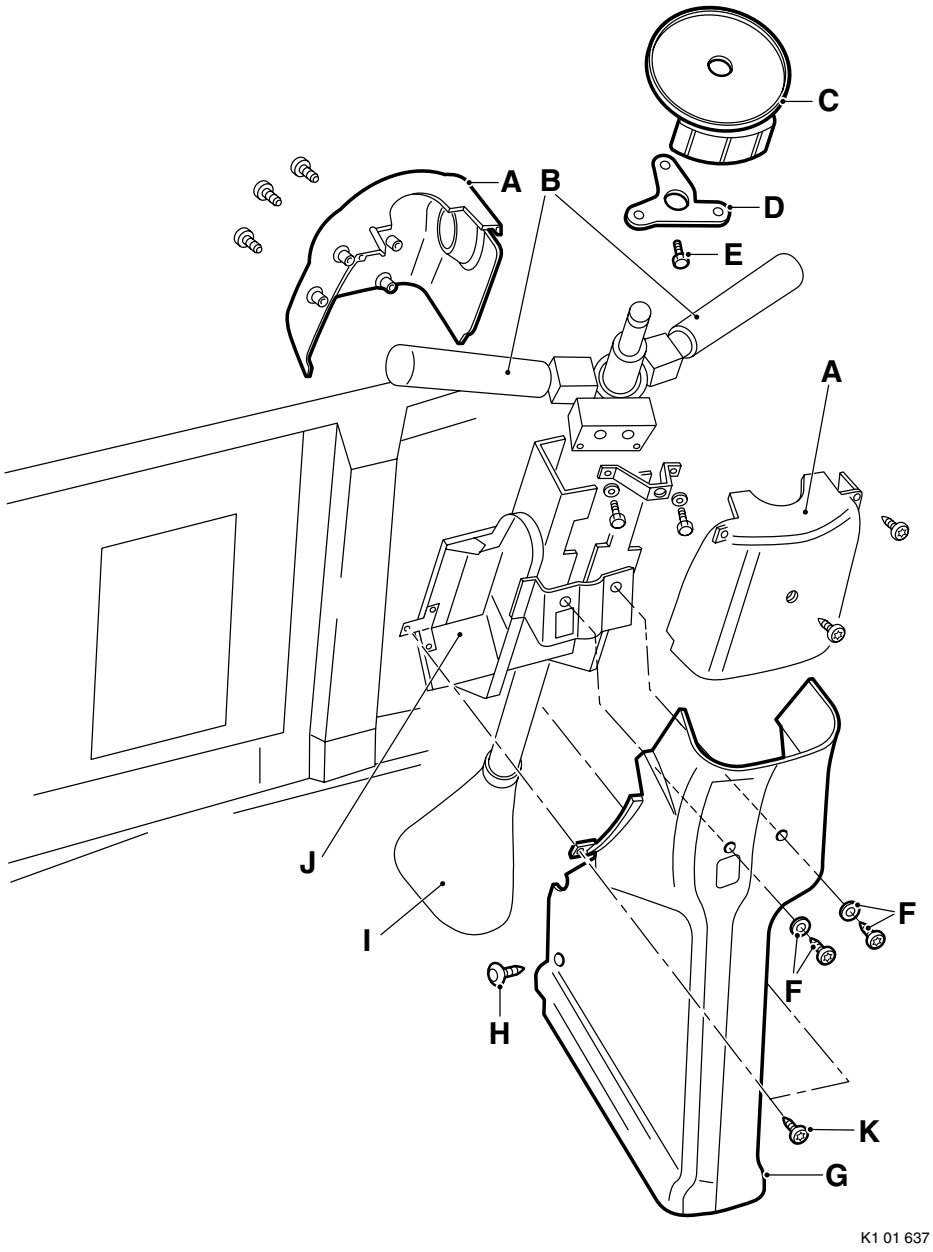
K1 00 936

Legend

1. Outlet grilles on window side
2. Dashboard panel, top
3. Dashboard panel on co-driver side
4. Central box cover
5. Dashboard panel on co-driver side
6. Dashboard panel on co-driver side
7. Engine tunnel storage tray
8. Dashboard panel underneath centre console
9. Ashtray and ashtray holder
10. Centre console
11. Radio panel
12. Instrument panel
13. Dashboard panel with light switches
14. Dashboard panel with vents to door

2

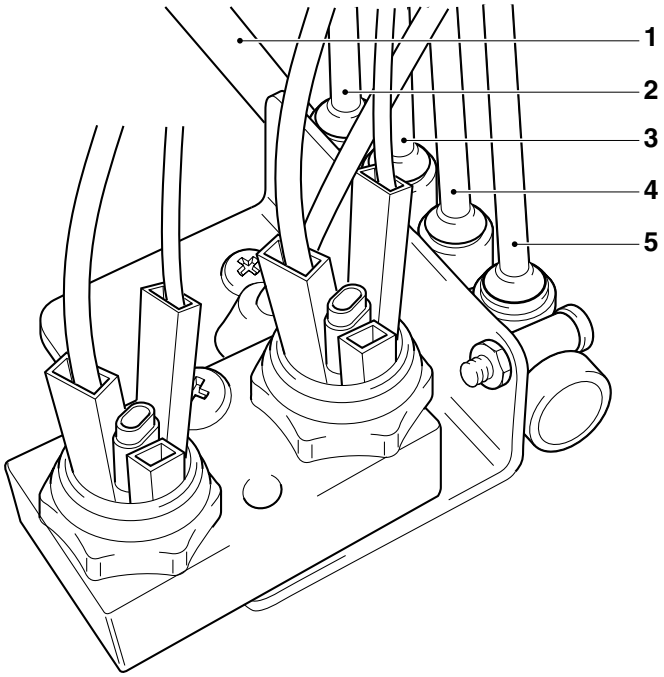
2.2 OVERVIEW DRAWING, STEERING COLUMN



Legend

A. Steering column cover panels, top
B. Steering column switches
C. Steering angle sensor (if present)
D. Bracket for steering angle sensor (if present)
E. Attachment bolt for steering angle sensor bracket
F. Attachment of steering column cover panels, bottom
G. Steering column cover panels, bottom
H. Panel clamp
I. Steering shaft grommet
J. Steering column

2.3 OVERVIEW DRAWING, VENTS IN CAB (OTHER USERS)



K1 01 152

Legend

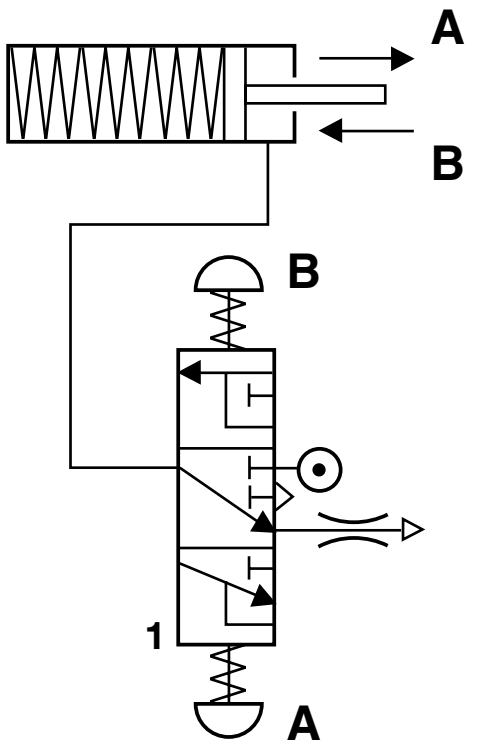
1. Supply (air)
2. Supply for driver's seat and air horn
3. Supply for G.V. valve
4. Supply for steering column
5. Supply for co-driver's seat

2.4 SYSTEM DESCRIPTION, STEERING COLUMN

The height and the tilt angle of the steering column can be adjusted manually. An 85-mm difference in height can be achieved between the lowest and highest positions by pulling the steering wheel upwards. There is a 15° angle between the two most extreme tilting positions.

A spring-loaded clamping mechanism fixes the steering column in position. An air cylinder located behind the steering column serves to release the steering column pneumatically. Once the steering column has been released, its movements are cushioned by a gas damper. The gas damper ensures that the steering column cannot drop after being released and that it can easily be pulled upwards.

The control valve (switch) is located on the front of the steering column. The valve is equipped with a calibrated vent. Should you forget to secure the column, this vent ensures that the air cylinder is bled in approximately 30 seconds. This gradual bleeding will take place whether the switch is unloaded or loaded.. In the top position (convex shape on switch) the cylinder is being vented, whereas in the bottom position the cylinder is being bled rapidly.



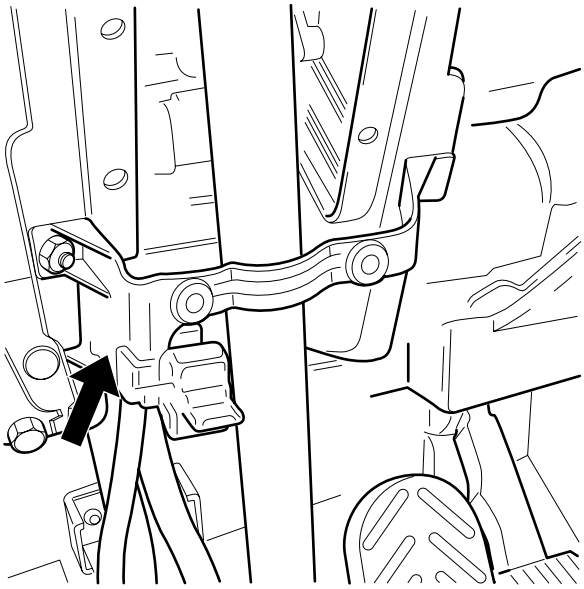
K1 01 040

© 200346

3. INSPECTION AND ADJUSTMENT

3.1 INSPECTING STEERING COLUMN SETTING VALVE

1. Check if the height and the angle of the steering column can be adjusted after the switch (convex top) is pressed.
2. Check whether the adjustment mechanism is securely locked again when operating the bottom of the switch.
3. Check whether the operating valve is bled after the s has been operated. Press the convex side of the switch and wait until the adjustment mechanism is blocked again (approx. 10 seconds).
4. If this is not the case, check that no air pipe is trapped. If not, replace the valve (switch).
5. Check whether the air pipe is attached to the cross member.



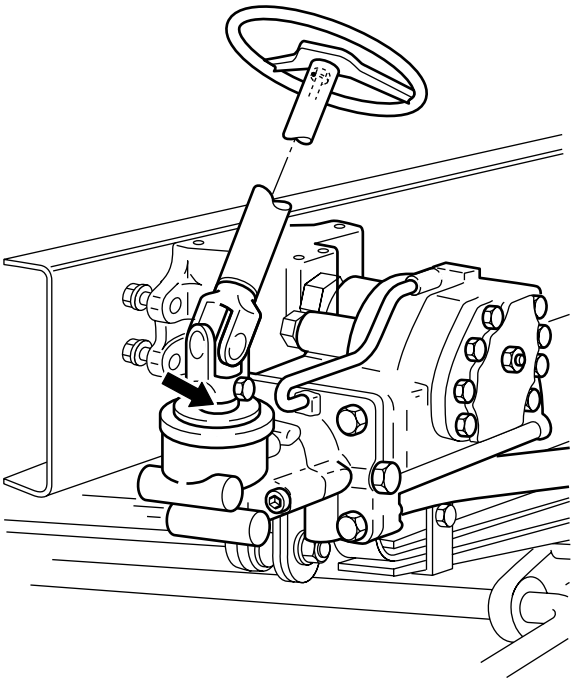
K1 01 559

3.2 CHECKING FASTENING OF UNIVERSAL JOINT TO STEERING BOX INPUT SHAFT

Checking fastening of universal joint to steering box input shaft

1. Check the universal joint for perceptible play. If perceptible play is detected, the affected part must be replaced.

2. Check whether there is any perceptible play between the spline connection of the universal joint and the steering box input shaft. If perceptible play is detected, the splines on the universal joint and those on the input shaft must be checked for wear. If wear is detected, the affected part must be replaced.
   If there is noticeable play but the parts are not worn, the attachment bolt and nut must be replaced. Tighten the attachment bolt and nut to the specified torque, see "Technical data".



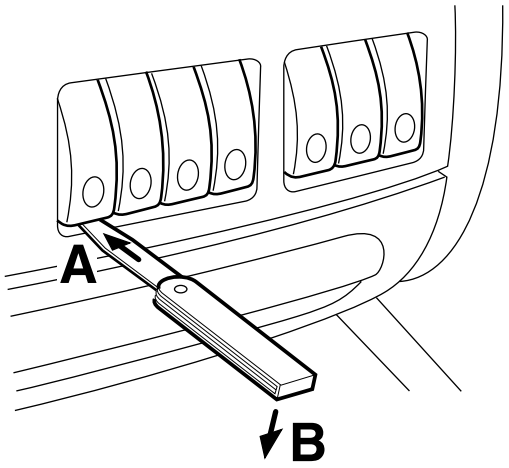
S7 00 639

4. REMOVAL AND INSTALLATION

4.1 REMOVAL AND INSTALLATION, SWITCHES

Removing switches

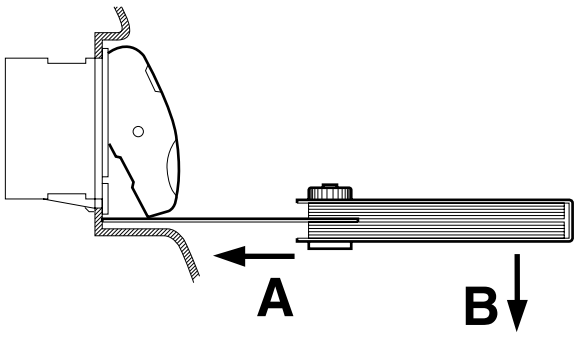
1. Insert a feeler gauge of approx. 1 mm thickness between the switch and the panel at the side of the finger-sized depression (A), until it touches the inside of the panel.
2. Remove the switch from its locked position by carefully moving the feeler gauge in the direction of the arrow (B).
3. Carefully remove the switch from the panel. In doing so, ensure that the connector lock does not catch behind the panel, causing the connector to fall behind the panel.
4. If necessary, remove the switch from the connector.



K1 01 334

Installing switches

1. Fit the connector.
2. Insert the switch into the opening in the panel and press until you can feel it lock.

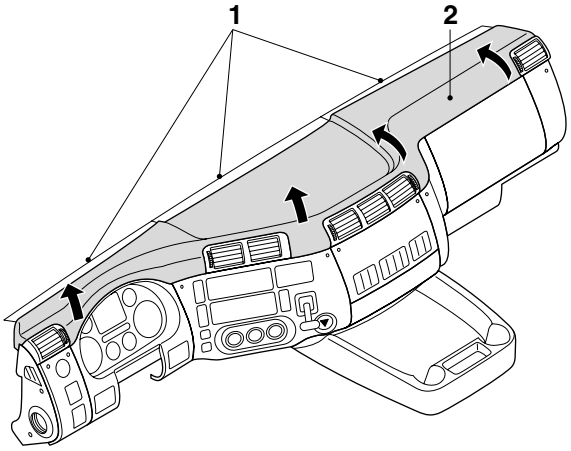


K1 01 335

4.2 REMOVAL AND INSTALLATION, DASHBOARD PANEL, TOP

Removing dashboard panel, top

Note:
Do not pull the dashboard panel away from the Velcro at the top before the ventilation grilles in the window edges have been removed.



K1 01 030

1. Remove the ventilation grilles (1) from the window edges.
2. Carefully pull (push) the dashboard panel (2) up at the front (Velcro fixings).
3. Tip the panel (2) towards the window and remove it.

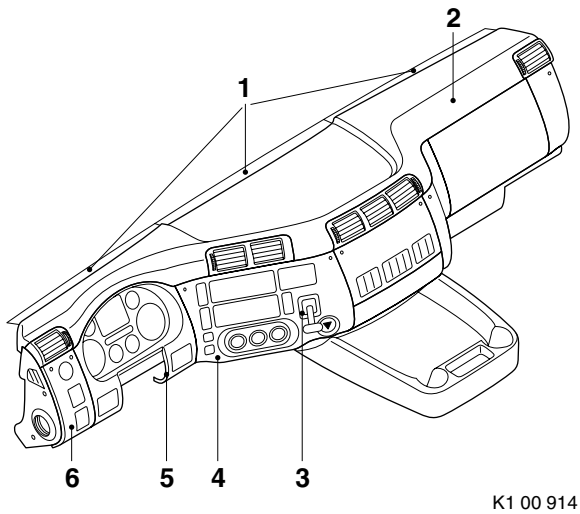
Installing dashboard panel, top

1. Check that the Velcro is still glued to the cover and the frame.
2. Put the cover in place and press firmly onto the Velcro.
3. Install the ventilation grilles and secure them using the attachment bolts.

4.3 REMOVAL AND INSTALLATION, INSTRUMENT PANEL

Removing instrument panel

1. Remove the ventilation grilles (1) from the window edges.
2. Remove the dashboard panel (2) at the top.
3. Remove the grommet (3) from the parking brake and remove the radio panel (4).
4. Remove the dashboard panel (6).
5. Remove the flywheel housing attachment bolts. Remove the connectors from the instrument panel and remove the instrument panel (5).



K1 00 914

Installing instrument panel

1. Fit the connectors.
2. Fit the instrument panel (5).
3. Fit the radio panel (4) and the dashboard panel (6).
4. Fit the grommet (3) around the hand brake valve.
5. Fit the dashboard panel (2) at the top
6. Fit the ventilation grilles (1) in the window edges.

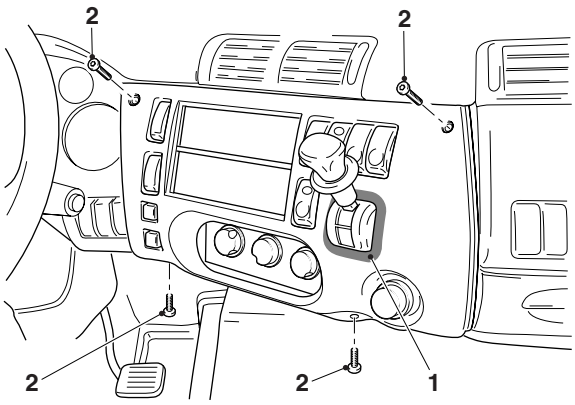
4.4 REMOVAL AND INSTALLATION, RADIO PANEL

Removing radio panel

1. Remove the central console panel.
2. Remove the rubber grommet (1) around the parking brake valve.
3. Remove the attachment bolts (2) and remove the radio panel. If necessary, mark the location of the connectors.

Installing radio panel

1. Fit the connectors.
2. Put the radio panel in place and fix with the attachment bolts (2).
3. Fit the rubber grommet (1) around the parking brake valve.
4. Fit the central console panel.



K1 00 934

4.5 REMOVAL AND INSTALLATION, ENGINE TUNNEL STORAGE TRAY

Removing storage tray

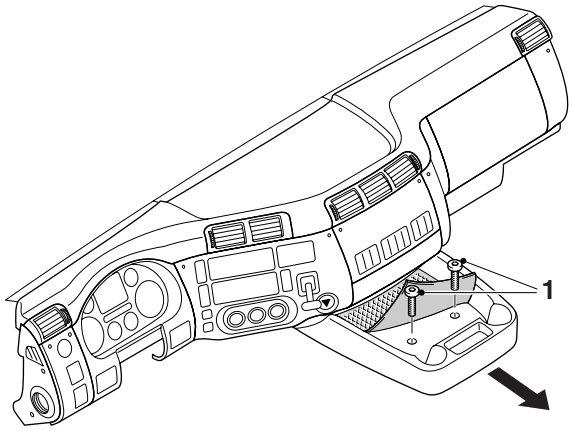
1. Remove the rubber inset mat and remove the attachment bolts (1) from the storage tray.

2. Remove the storage tray

Installing storage tray

1. Put the storage tray in place and secure it using the attachment bolts (1).

2. Fit the rubber mat.

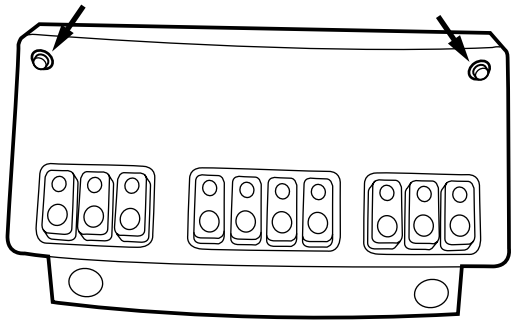


K1 00 916

4.6 REMOVAL AND INSTALLATION, CENTRAL CONSOLE CONTROL PANEL

Removing central console control panel

1. Remove the panel underneath the ashtray.
2. Remove the ashtray and the ashtray holder
3. Remove the attachment bolts from the top and put the control panel to one side.
4. Remove the connectors from the control panel and remove the control panel.



K1 00 927

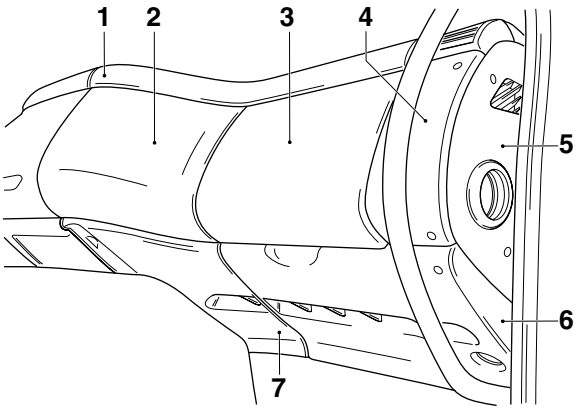
Installing central console control panel

1. Fit the connectors in the control panel.
2. Put the control panel in place and fasten it with the attachment bolts.
3. Fit the ashtray and the ashtray holder.
4. Fit the panel underneath the ashtray.

4.7 REMOVAL AND INSTALLATION, DASHBOARD PANELS ON CO-DRIVER SIDE

Removing dashboard panels on co-driver side

1. Remove the ventilation grille from the window edge.
2. Carefully pull (push) the dashboard panel (2) up at the front (Velcro fixings).
3. Remove the dashboard panel (1) at the top.
4. Remove the cover from the central box (3).
5. Remove the attachment bolts from the dashboard panels (2, 4, 5, 6 and 7) and remove these panels.
6. Put the floor mat to one side and remove the plastic panel that rests on the floor plate.



K1 01 068

Installing dashboard panel on co-driver side

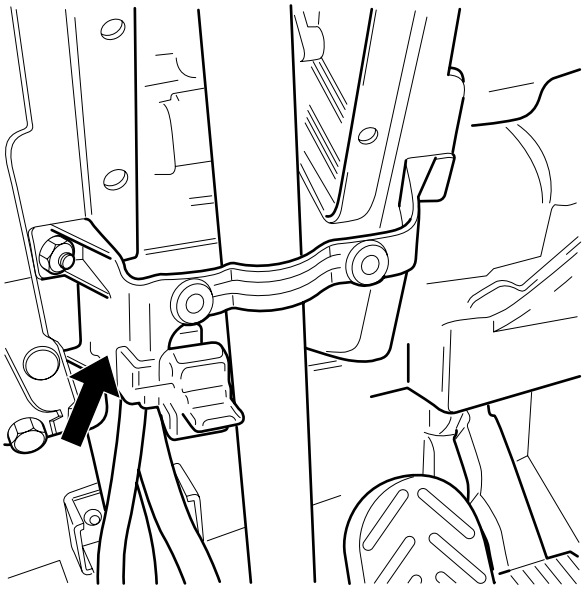
1. Fit the plastic panel that rests on the floor plate and reposition the floor mat.
2. Fit the dashboard panels (2, 4, 5, 6 and 7) and tighten them with the attachment bolts.
3. Fit the cover of the central box (3).
4. Fit the dashboard panel (1) at the top. Press the dashboard panel well onto the Velcro.
5. Fit the ventilation grilles in the window edges.

4.8 REMOVAL AND INSTALLATION, PNEUMATIC STEERING COLUMN SETTING SWITCH/VALVE

Removing pneumatic steering column setting switch/valve

1. Remove the steering column panels.

2. Remove the bracket with the steering column switch, disconnect the air pipes and push the switch from the bracket.



K1 01 559

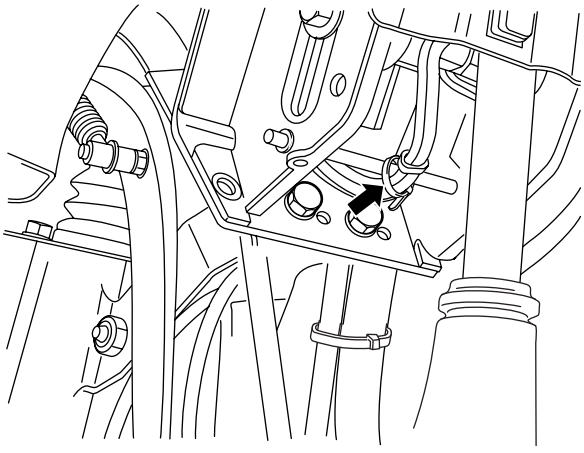
Installing pneumatic steering column setting switch/valve

1. Connect the air pipes to the switch.

2. Press the switch into the bracket and fit the bracket to the steering column.

3. Tie the air pipe to the cross member.

4. Install the steering column panels.



K1 01 007

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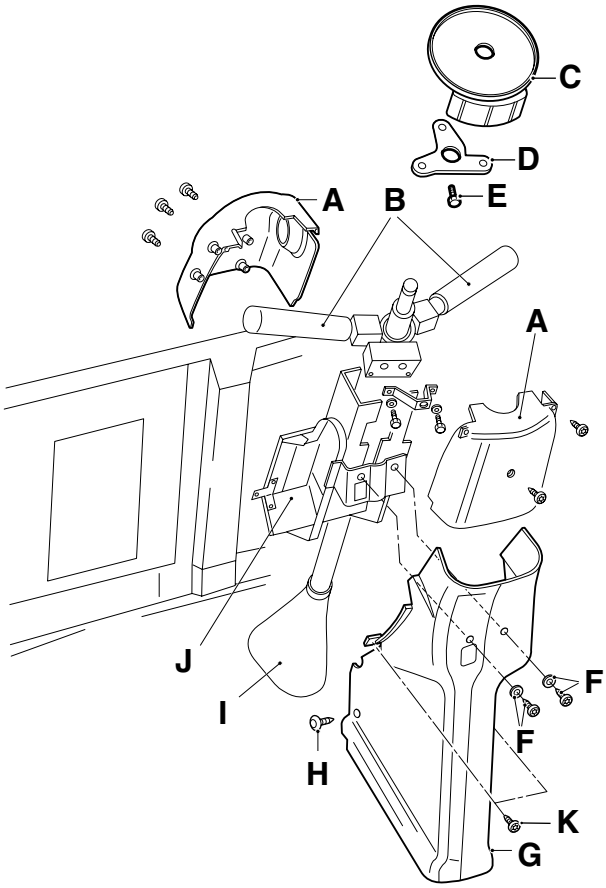
4.9 REMOVAL AND INSTALLATION, STEERING COLUMN PANELS

Removing steering column panels

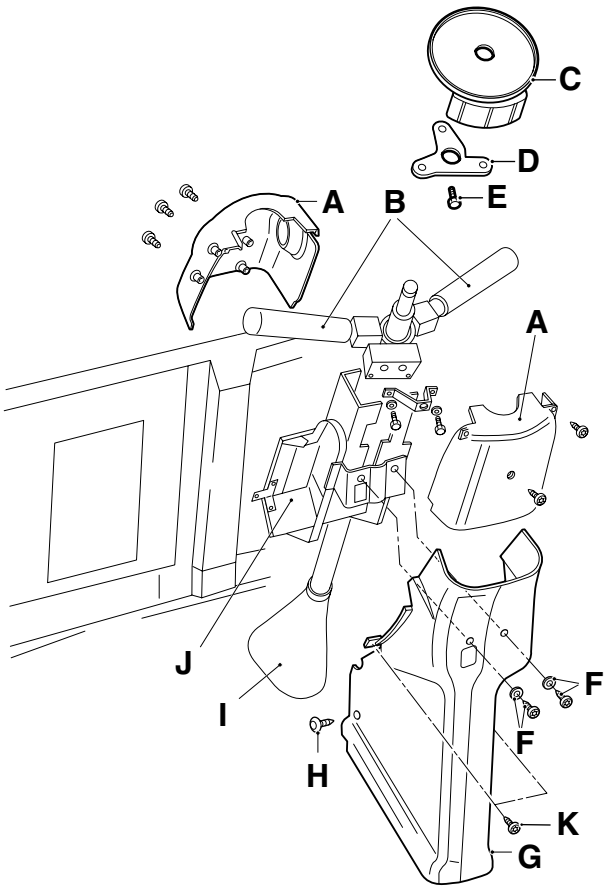
1. If necessary, remove the floor mat.
2. Using the steering column setting, move the steering wheel to its highest possible position.
3. Remove the two halves of the cover (A) under the steering wheel. The right-hand side of the upper cover (A) (ignition lock side) must be released by lifting and sliding it across the left handle (direction indicator/ windscreen wiper side).
4. Remove the storage tray from the engine tunnel.
5. Remove at the bottom the dashboard panels to the left and right of the steering column.
6. Remove the panel from the underside of the steering column (G) by removing the attachment bolts (F) and (K) and the panel clamp (H).



K1 01 636

Installing steering column panels

1. Check if the air pipe is attached to the cross member.
2. Fit the panel (G) on the steering column and fix it with the panel clamp (H) and the attachment bolts (F) and (K).
3. Fit the dashboard panels underneath the steering column (left and right).
4. Fit the storage tray on the engine tunnel.
5. Fit the two halves of the cover (A) beneath the steering wheel.
6. If applicable, position the floor mat.



K1 01 636

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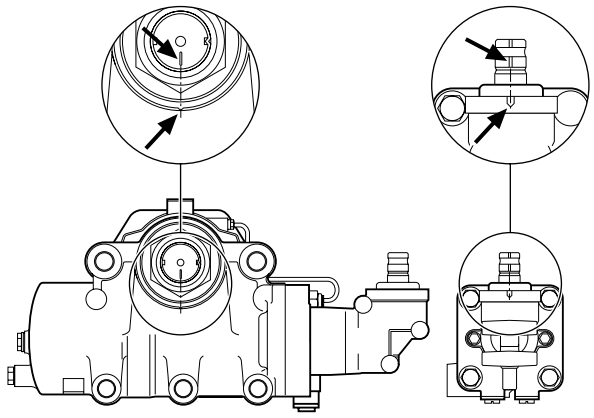
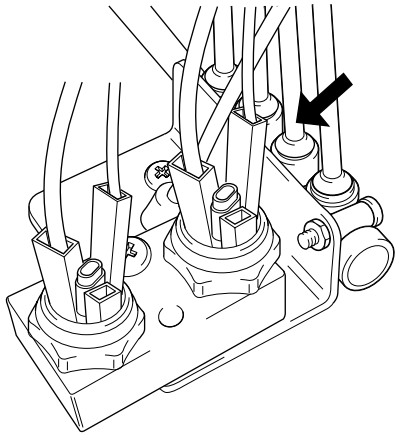
4.10 REMOVAL AND INSTALLATION, STEERING COLUMN

Removing steering column

1. Set the steering gear in the central position; check this using the marks on the steering box.
2. Remove the steering column panels.
3. Disconnect the earth terminal from the batteries.
4. Remove the radio panel.
5. Remove the steering wheel.
6. Detach the connector of the steering angle sensor, if the latter is fitted.
7. Remove the steering angle sensor, if fitted.
8. Detach the connectors of the combi switches, the immobiliser and the ignition switch behind the radio panel.
9. Remove the bracket holding the height setting switch.
10. Remove the air pipe of the pneumatic steering column setting from the manifold by pushing on the yellow ring and removing the pipe.
11. Remove the attachment bolt of one universal joint of the steering shaft (depending on the operations to be performed; either the universal joint beneath the steering wheel or the universal joint on the steering box). Before loosening, mark the position of the universal joint in relation to the steering shaft.

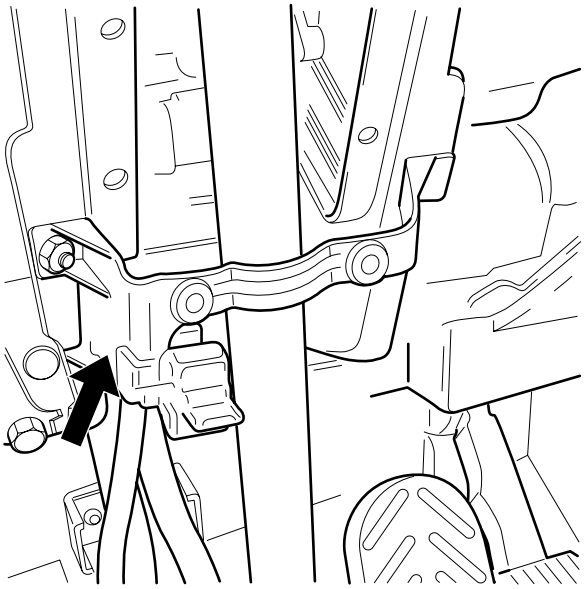


S7 00 024



K1 01 136

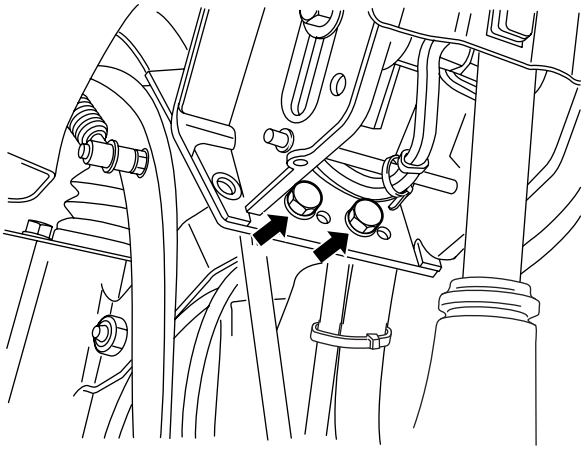
12. Remove the upper lock nuts on the side of the steering column.



K1 01 559

13. Remove the attachment bolts at the bottom of the steering column.

14. Remove the steering column.



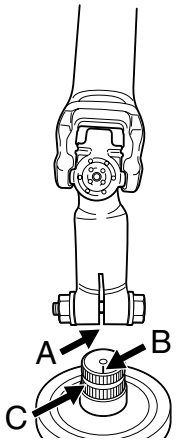
K1 00 919

Installing steering column

1. Place the steering shaft on the universal joint. Line up the groove (A) in the clutch with the mark (B) on the steering shaft.

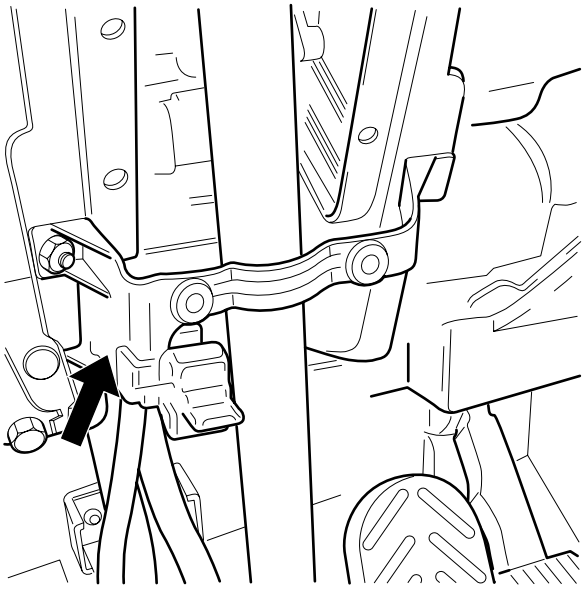
Check that the steering shaft is correctly in place in the universal joint so that the bolt can be put in the notch (C).

2. Only fit a new attachment bolt and attachment nut to the universal joint. Tighten the attachment bolt to the specified torque. See "Technical data".



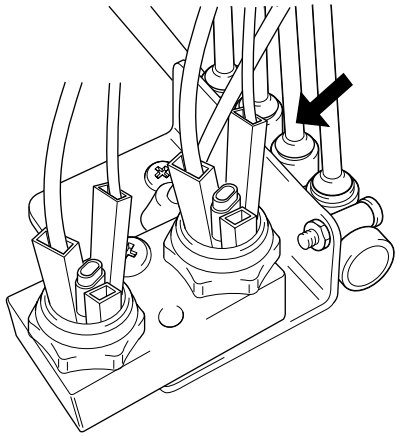
K1 01 353

3. Position the steering column by tightening the top attachment bolts by hand.



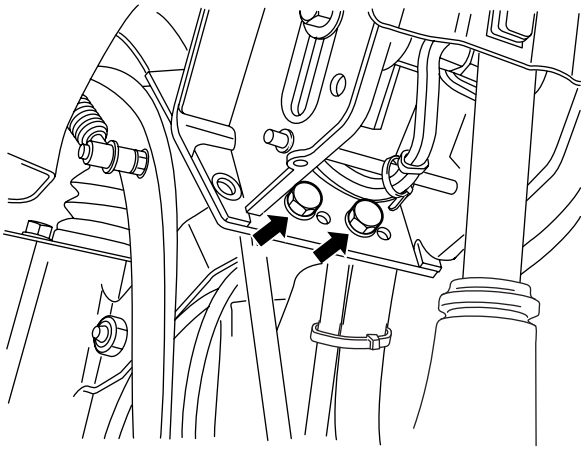
K1 01 559

4. Attach the air pipes to the connection block behind the dashboard. Check to see that the air pipe does not touch any moving parts.
5. Fit the bracket holding the height setting switch.
6. Fit all steering column connectors behind the radio panel.
7. If present, fit the steering angle sensor with its connector.
8. Fit the steering wheel.



K1 01 136

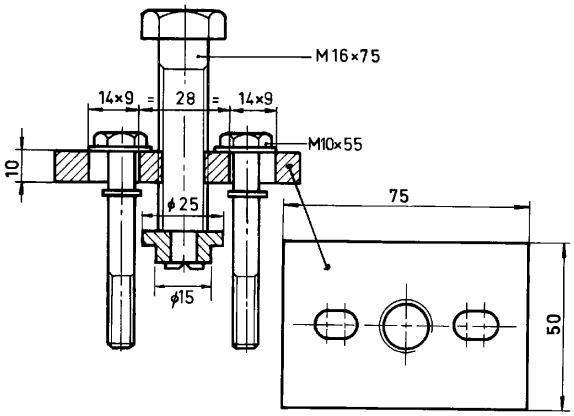
9. Replace the lower attachment bolts and tighten the steering column.
10. Tighten the upper attachment bolts.
11. Install the steering column panels.
12. Fit the radio panel.
13. Connect the earth terminal to the batteries.



K1 00 919

4.11 REMOVAL AND INSTALLATION, STEERING WHEEL

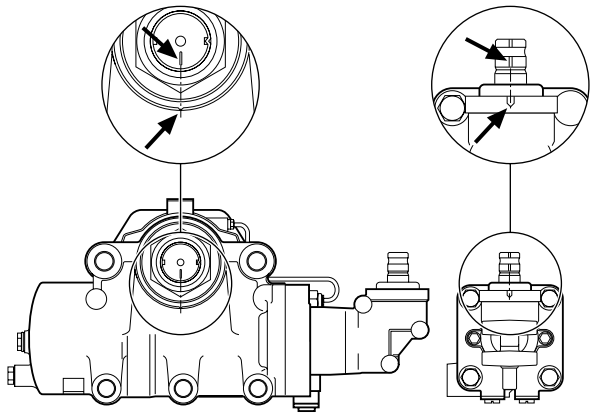
Note:
The special tools that are required to remove the steering wheel cannot be obtained from DAF. These tools should be manufactured by yourself according to the drawing.



S7 00 065

Removing steering wheel

1. Place the steering gear in the central position using the marks on the steering box.

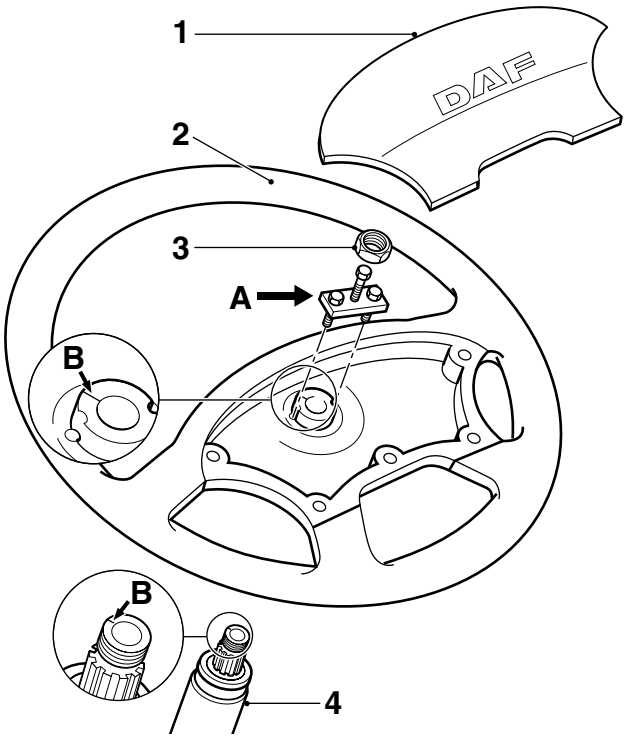


S7 00 024

2. Remove the cover plate (1) from the steering wheel (2).

3. Remove the attachment nut (3) of the steering wheel.

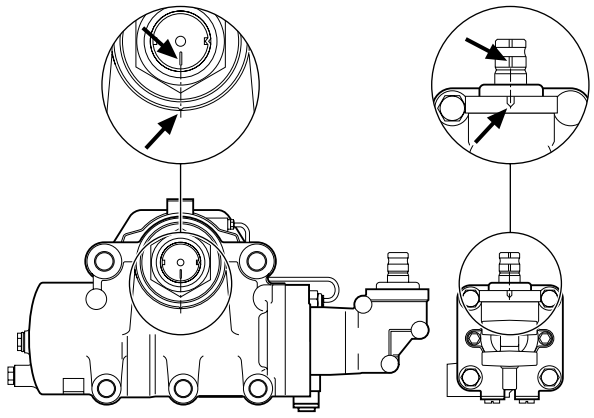
4. Fit the special tool, steering wheel puller (A), to the steering wheel using its two outer bolts. Screw in the central bolt of the steering wheel puller until the steering wheel is released.



K1 01 144

Installing steering wheel

1. Check whether the steering gear is still in the central position using the marks on the steering box or the steering gear.

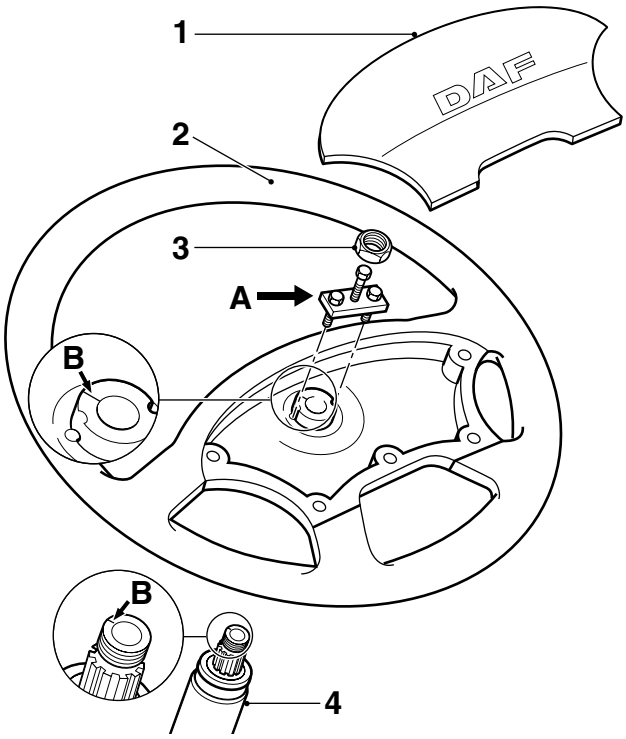


S7 00 024

2. Fit the steering wheel (2) on the steering shaft (4) so that the marks on the steering wheel and the steering shaft "align", (see the arrows B) in the drawing.

3. Fit the steering wheel attachment nut (3). Tighten the nut to the specified tightening torque, see "Technical data".

4. Fit the cover plate (1).



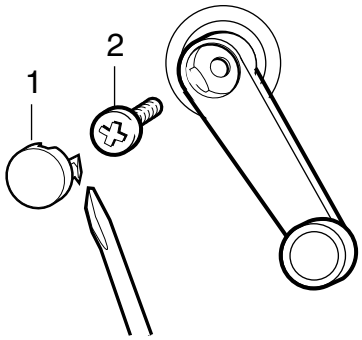
K1 01 144

4.12 REMOVAL AND INSTALLATION, DOOR PANEL

Removing door panel

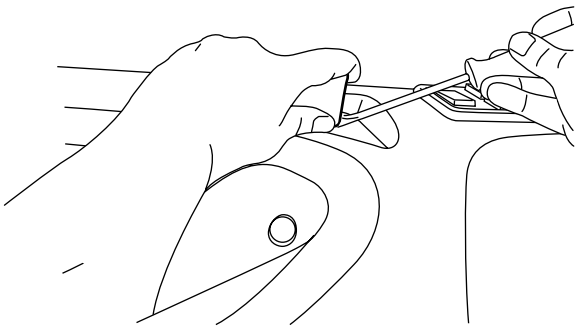
1. If a manual window mechanism is fitted, remove the cover (1) using a sharp screwdriver.

2. If a manual window mechanism is fitted, remove the attachment bolt (2) and remove the handle.



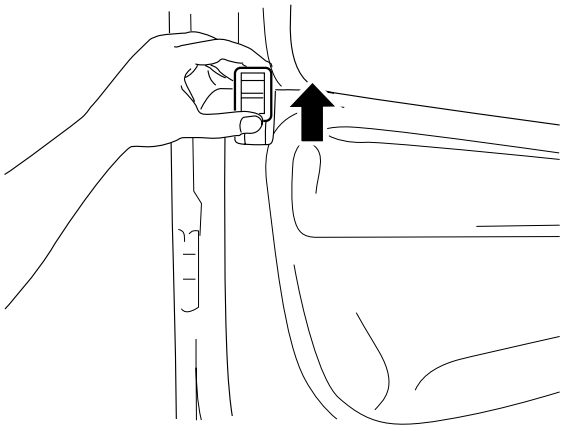
K1 00 913

3. Remove the door knob by lifting it (open door) and pressing the locking clip underneath the knob. Pull the knob off the mechanism.



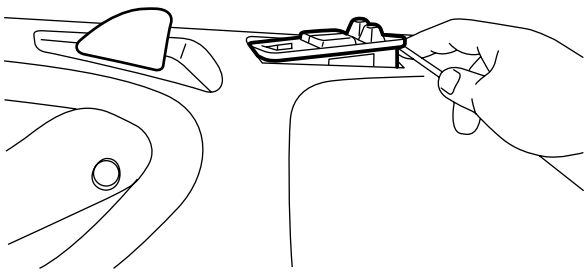
K1 01 024

4. Remove the alignment plate for the door lock by pushing it upward slightly with a small screwdriver. The alignment plate can then be pulled from the panel by hand.



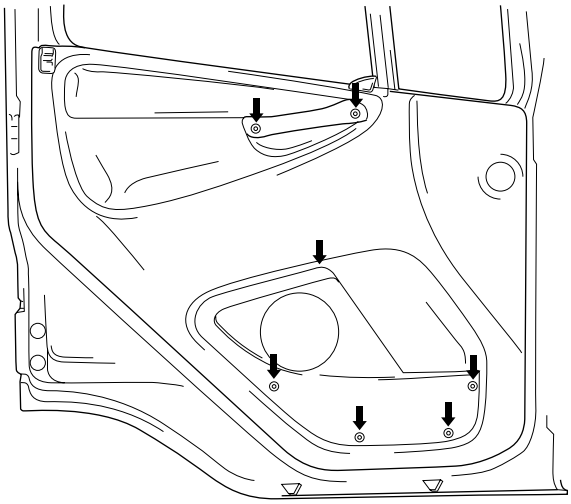
K1 01 025

5. Remove the control panel from the door panel (electric window and mirror). Mark the position of the connectors and remove them.



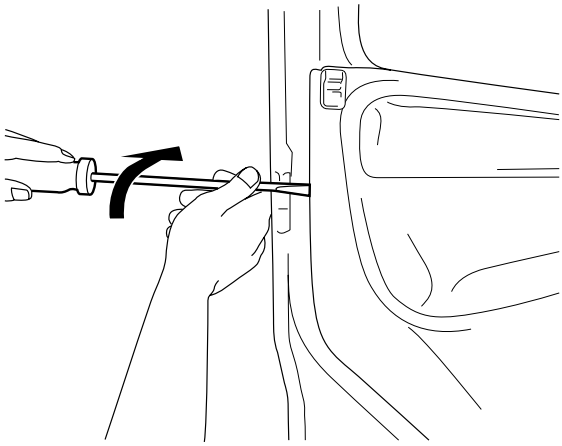
K1 01 026

6. Remove the cover from the speaker and remove the fixing bolts from the door panel.



K1 01 336

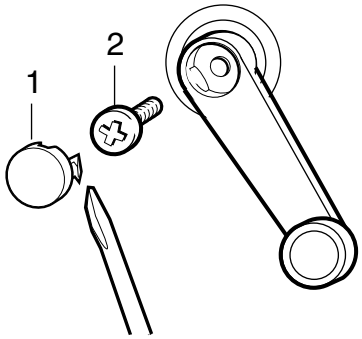
7. Stick a screwdriver into the openings on the sides of the panel and pull the spring clips from the clamping sleeves. Avoid damaging the paintwork.



K1 00 918

Installing door panel

1. Put the door panel in place (push into place)
2. Fit the door panel attachment bolt.
3. Fit the handle and secure it using the attachment bolts.
4. Fit the speaker cover.
5. Fit the unlocking handle on the door lock (push into place).
6. If applicable, fit the control for the window mechanism. Fit the attachment bolt (2) and the cover (1).
7. Replace the connectors for the control panel and fit the control panel in the door panel (push into place).

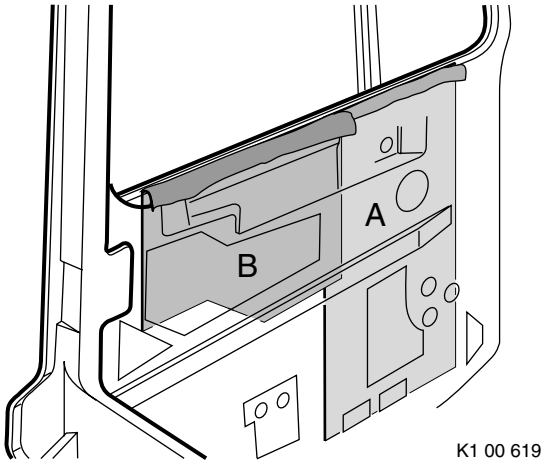


K1 00 913

4.13 REMOVAL AND INSTALLATION, INTERIOR DOOR FOILS

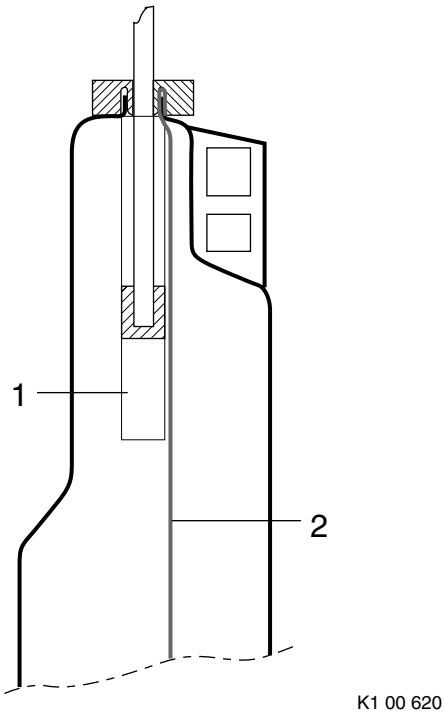
Removing front foil

1. Remove the drop and fixed glass.
2. Partly remove the inner foil.
3. Remove the foil (A).



Installing front foil

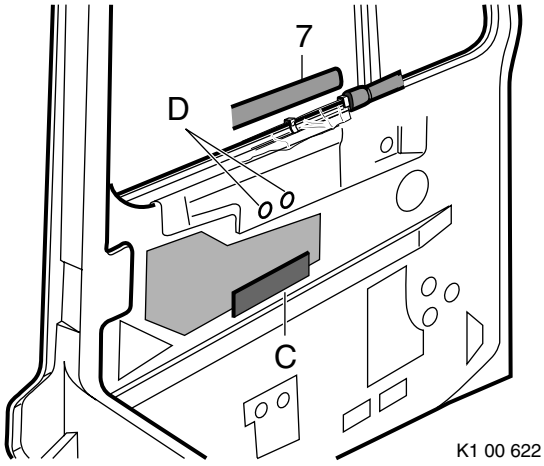
1. Fit the foil (A).
2. Position the foil (2) between the window guide rail (1) and the inner door panel.
3. Fit the fixed door window.
4. Fit the inner window seal.



2

Removing rear foil

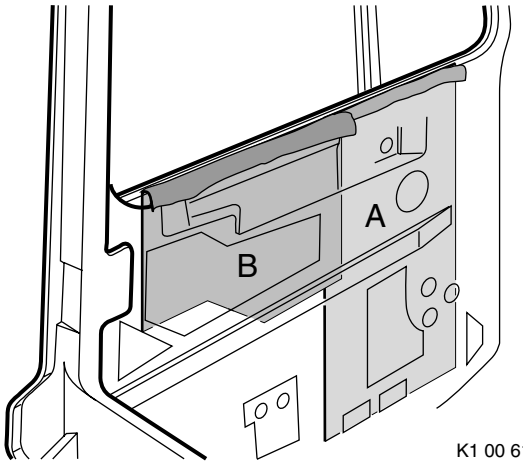
1. Remove the door panel.
2. Remove the window seal on the inside (7) and detach the foil (B) at (C).
3. Remove the upper attachment bolts of the window mechanism and loosen the lower attachment bolts.
4. Remove the foil (B).



K1 00 622

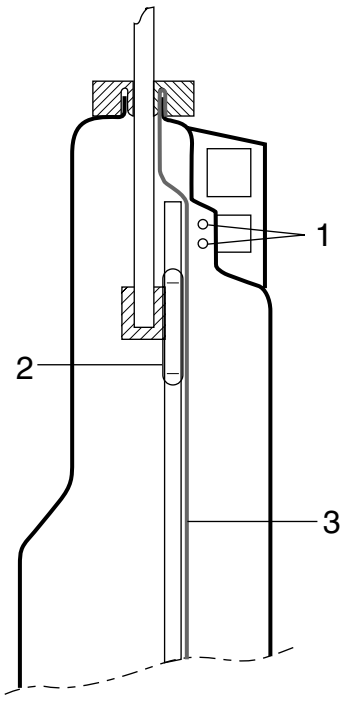
Installing rear foil

1. Fit the foil (B).



K1 00 619

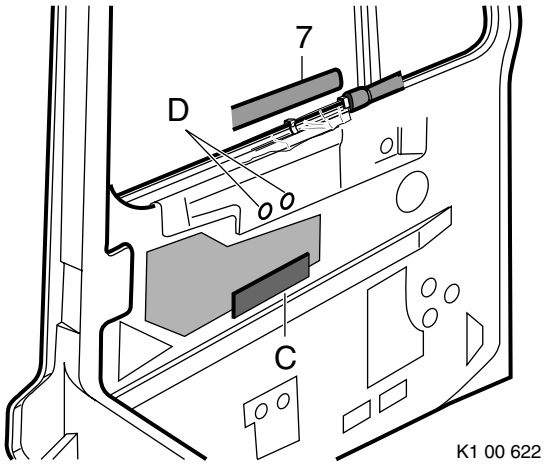
2. Position the foil (3) between the door lock control rod (1) and the window mechanism (2).
3. Pierce the foil in the places where it covers the upper attachment holes of the window mechanism. Fit the attachment bolts and tighten the lower attachment bolts.



K1 00 621

4. Fit the window seal on the inside (7). Attach the foil at C, using tape.

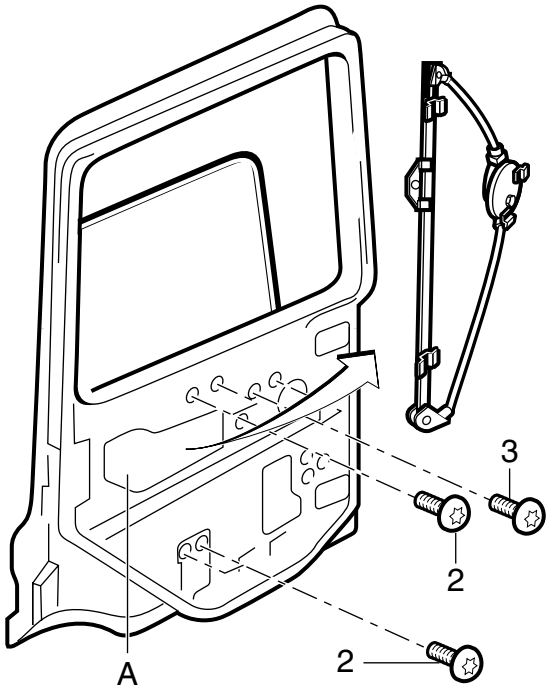
5. Install the door panel.



4.14 REMOVAL AND INSTALLATION, MANUALLY OPERATED WINDOW MECHANISM

Removing manually operated window mechanism

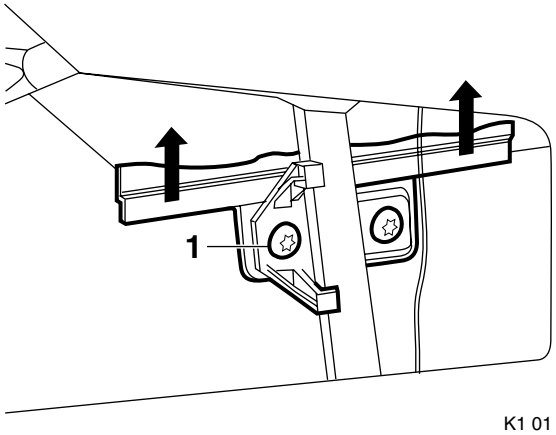
1. Remove the door panel.
2. Detach the foil at (A).
3. Lower the glass, remove the attachment bolts (1) and raise the glass.
4. Remove the attachment bolts (2) and (3) and remove the window mechanism from the door through the opening.



K1 00 908

Installing manually operated window mechanism

1. Fit the window mechanism in the door and fit the attachment bolts (2) and (3).
2. Lower the glass and fit it to the window mechanism using attachment bolts (1).
3. Raise the glass. Close the glass almost completely. Check whether the top edge of the drop glass is parallel to the window frame. Loosen the attachment bolts (1), if necessary. Move the glass to the correct position and re-tighten the attachment bolts.
4. Use tape to attach the foil at (A).
5. Install the door panel.



K1 01 089

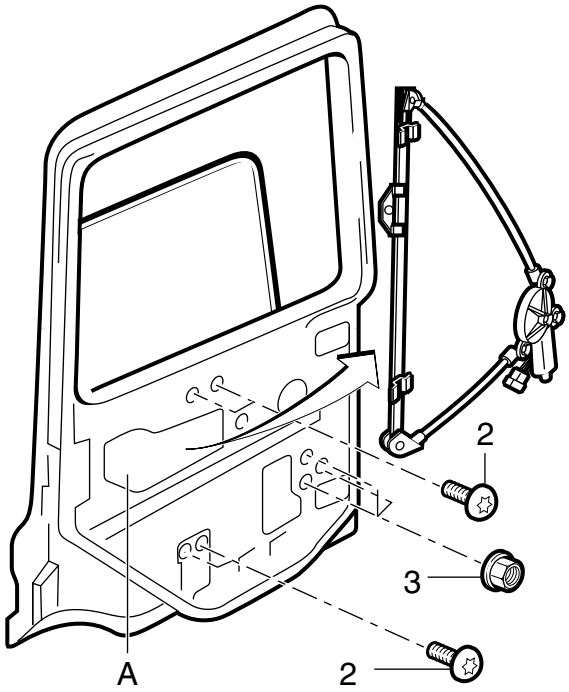
4.15 REMOVAL AND INSTALLATION, ELECTRICALLY OPERATED WINDOW MECHANISM

Removing electrically operated window mechanism

1. Remove the door panel.
2. Detach the foil at (A).
3. Lower the glass, remove the attachment bolts (1) and raise the glass.
4. Detach the electric motor connector.
5. Remove the attachment bolts (2) and attachment nuts (3) and remove the window mechanism from the door through the opening.

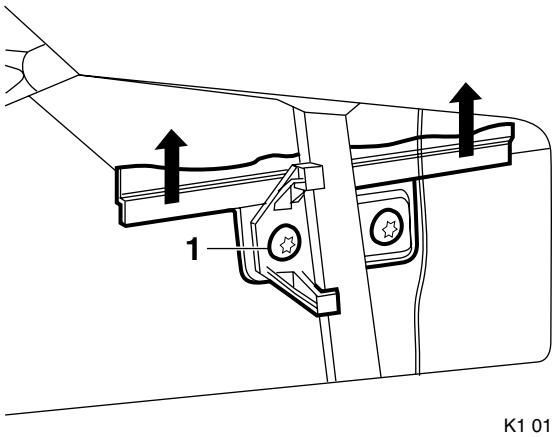
Installing electrically operated window mechanism

1. Fit the window mechanism in the door and fit the attachment bolts (2) and attachment nuts (3).
2. Connect the electric motor connector.



K1 00 909

3. Lower the glass and fit it to the window mechanism using attachment bolts (1).
4. Operate the window switch. Close the glass almost completely. Check whether the top edge of the drop glass is parallel to the window frame. Loosen the attachment bolts (1), if necessary. Move the glass to the correct position and re-tighten the attachment bolts.
5. Use tape to attach the foil at (A).
6. Install the door panel.

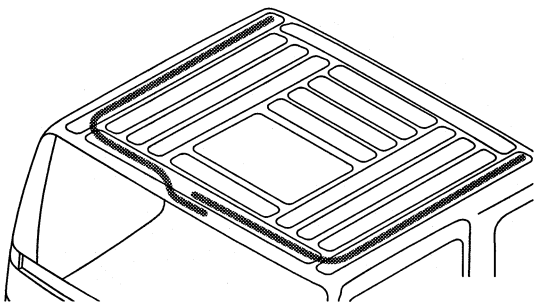


K1 01 089

4.16 REMOVAL AND REPLACEMENT, ROOF CONSOLE (DAY/SLEEPER/HIGH SLEEPER)

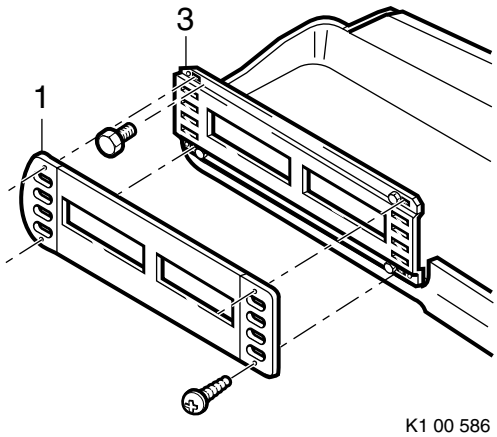
Removing roof console

1. Remove the roof rails from the fixings using a screwdriver.

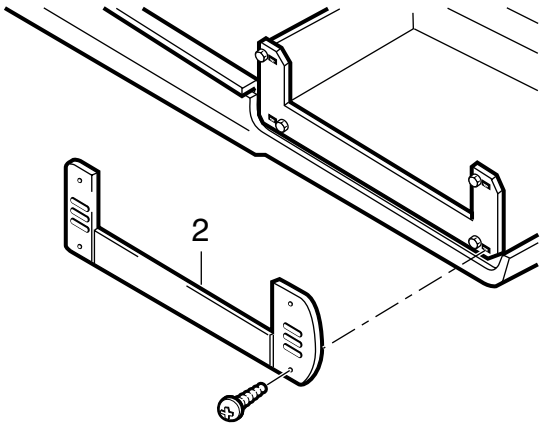


K1 01 070

2. Remove the rail fixings.
3. Remove the covers (1) and (2) on both sides of the roof console and remove the connectors if necessary.



K1 00 586



K1 00 587

4. Support the roof console and remove the attachment bolts (4) at the front of the roof console.

5. Support the roof console and remove the bolts (5) on the window side.

6. Remove, if necessary, the connectors and remove the roof console.

Installing roof console

1. Fit the connectors.

2. Put the roof console in place and position it using a few bolts.

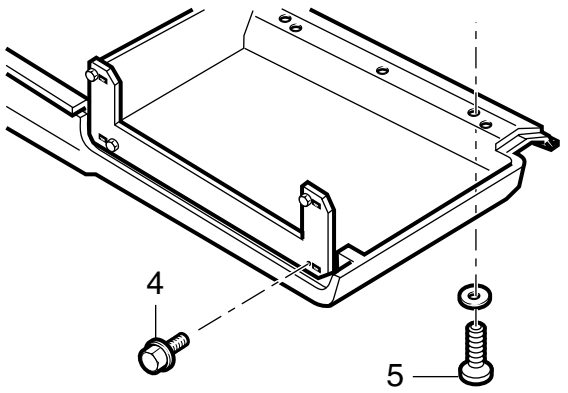
3. Place the attachment bolts at the front of the roof console and tighten.

4. Fit the attachment bolts in the window edges.

5. Fit the front cover panels.

6. Fit the rail fixings.

7. Attach the roof rails to the fixings.

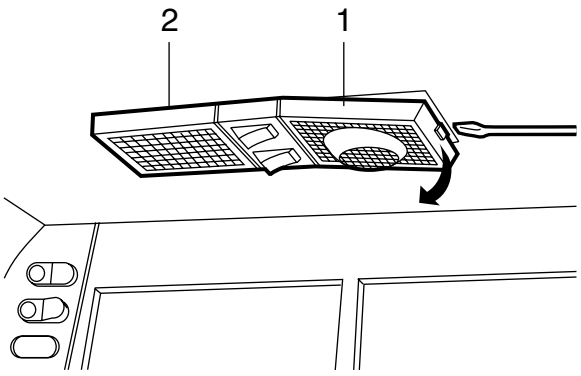


K1 00 588

4.17 REMOVAL AND INSTALLATION, INTERIOR LIGHTING

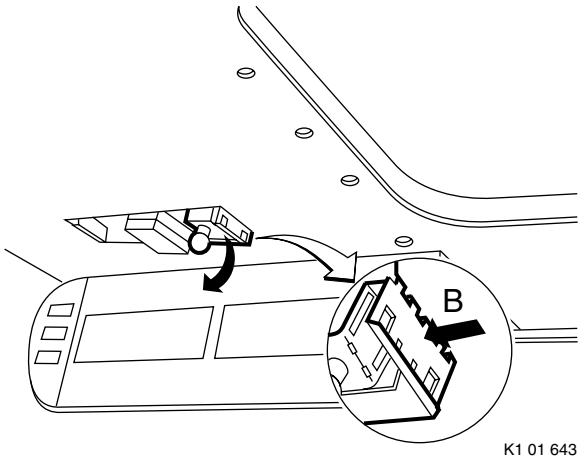
Removing interior lighting

1. Remove the covers (1) and (2).



K1 01 071

2. Use a screwdriver to push the lug (B) of the lamp holder.
3. Take the lamp holder out of the headlining.
4. Unplug the connectors and remove the lamp holder.



K1 01 643

Installing interior lighting

1. Bend back the lug (B) of the lamp holder.
2. Connect the connectors.
3. Fit the frame in such a way that the directable spotlight is located on the door side.
4. Fit the covers (1) and (2).

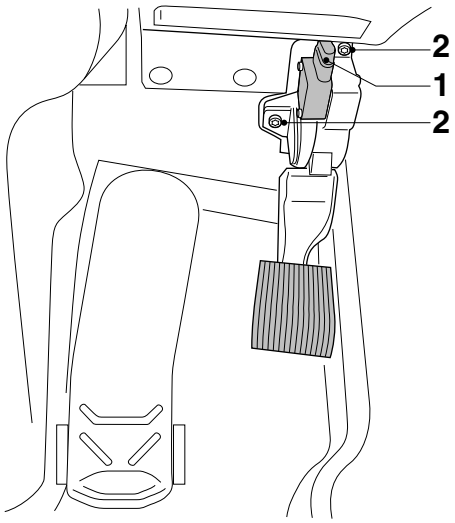
4.18 REMOVAL AND INSTALLATION, ACCELERATOR PEDAL

Removing accelerator pedal

1. Remove the dashboard panel from above the accelerator pedal.
2. Remove the connector (1) from the accelerator pedal.
3. Remove the attachment bolts (2) and remove the accelerator pedal.

Installing accelerator pedal

1. Fit the accelerator pedal with the attachment bolts (2).
2. Install the connector (1).
3. Fit the dashboard panel above the accelerator pedal.

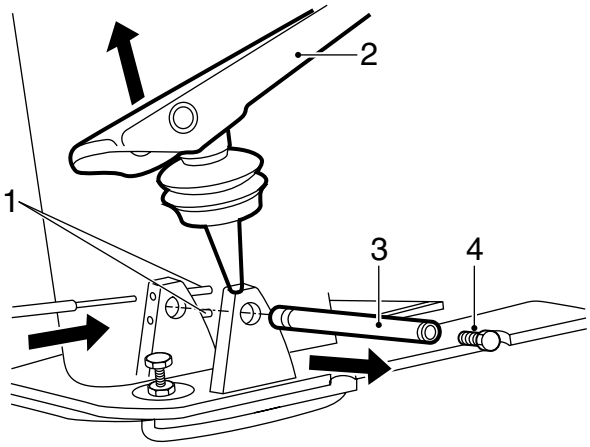


K1 01 088

4.19 REMOVAL AND INSTALLATION, BRAKE PEDAL

Removing brake pedal

1. Remove the clamping bushes (1) with a punch in the direction indicated.
2. Remove the sealing plug out of the hinge pin (3) using a screwdriver.
3. Put an M5 bolt (4) in the hinge pin and remove the hinge pin in the direction shown.
4. Remove the brake pedal (2) and fittings.



K1 00 912

Installing brake pedal

1. Fit the brake pedal (2) and fittings.
2. Fit the hinge pin (3).
3. Fit the sealing plug.
4. Fit the clamping bushes (1) in the driving direction of the vehicle.
5. Check the operation of the brake pedal.
6. Check that the locked nut underneath the brake pedal has adequate play.

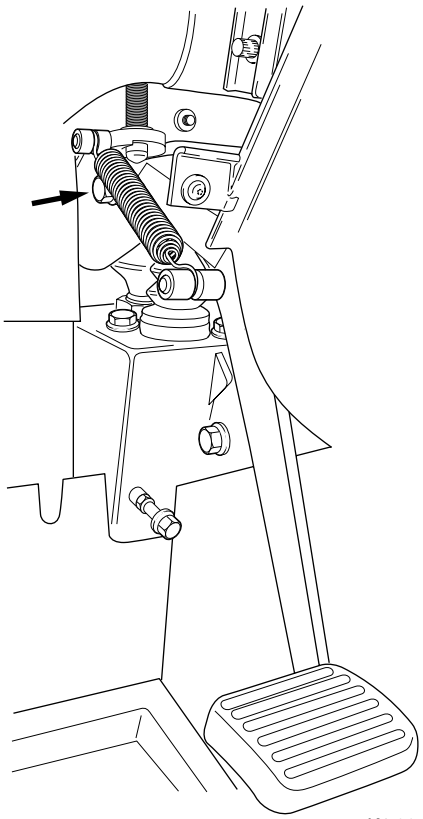
4.20 REMOVAL AND INSTALLATION, CLUTCH PEDAL

Removing clutch pedal

1. Remove the storage tray from the engine tunnel.
2. Remove the dashboard panels to the left and right of the steering column.
3. Remove the steering column panel.
4. Remove the spring from the clutch pedal.
5. Remove the bolt that controls the clutch cylinder.
6. Loosen the recessed locking bolt (1) on the outside of the vehicle and push the clutch pedal spindle to the left.
7. Remove the clutch pedal from the inside.

Installing clutch pedal

1. Put the clutch pedal in place.



K1 00 945

2. Apply locking compound to the recessed locking bolt (1). See "Technical data".

3. Push the spindle to the right and tighten the recessed locking bolt. Put silicone sealant on the end of the clutch pedal spindle (2).

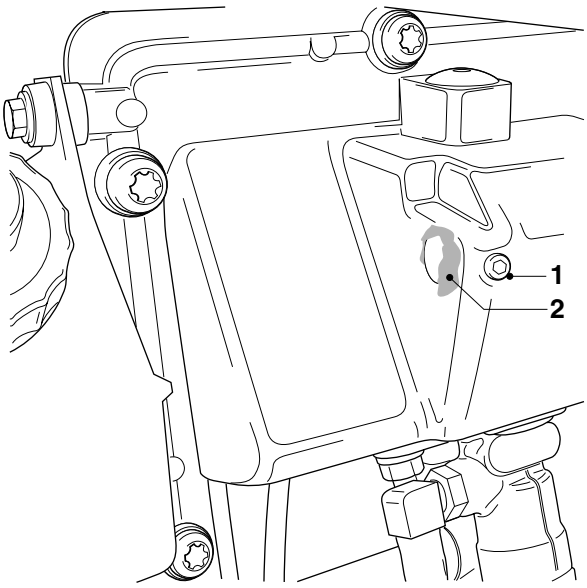
4. Replace the bolt that controls the clutch cylinder (take care with the ring).

5. Install the clutch pedal spring.

6. Fit the dashboard panels to the left and right of the steering column.

7. Fit the steering column panel.

8. Fit the storage tray on the engine tunnel.



K1 01 065

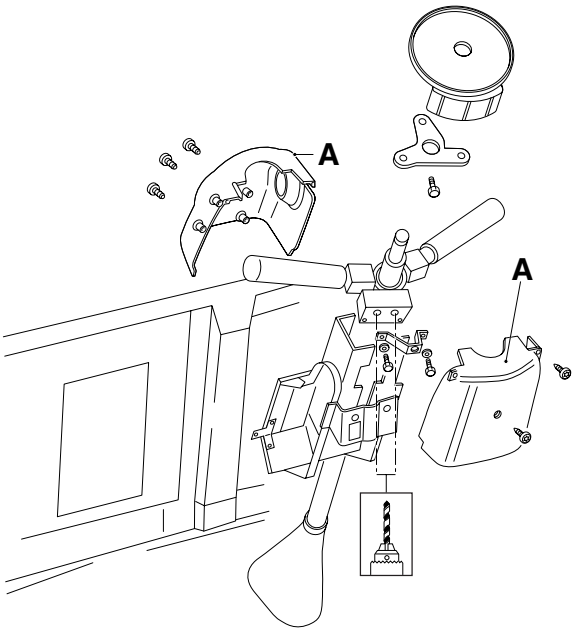
4.21 REMOVAL AND INSTALLATION, IGNITION LOCK

Removing ignition lock

1. Remove the covers (A) from the steering column below the steering wheel.
2. Remove the radio panel.
3. Unplug the ignition lock connectors behind the radio panel.
4. Drill off the head of the security bolt, use a bit with the same diameter as the hole where the head goes into and remove the ignition lock.

Installing ignition lock

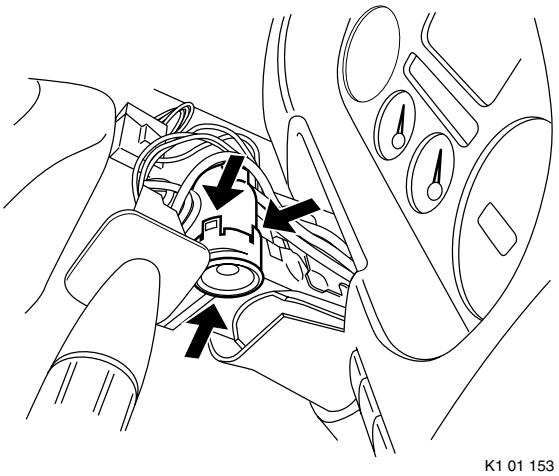
1. Fit the ignition lock.
2. Tighten the security bolts with such a torque that the heads break off.
3. Fit the connectors.
4. Fit the radio panel.
5. Fit the covers (A) around the steering column.



4.22 REMOVAL AND INSTALLATION, IMMOBILISER

Removing immobiliser

1. Remove the cover panels from the steering column.
2. Remove the radio panel.
3. Remove the connector of the immobiliser.
4. Push the housing of the immobiliser aside.
5. Remove the immobiliser.


K1 01 153

Installing immobiliser

1. Fit the immobiliser. Push the immobiliser into the housing.
2. Fit the connector.
3. Fit the radio panel.
4. Fit the cover panels around the steering column.

   Note:
   If the immobiliser is replaced then the following procedure must be carried out using DAVIE XD.

5. The new immobiliser must be adjusted to the electronic unit of the engine management system.
6. The new ignition keys must be adjusted to the new immobiliser. The 'old' keys cannot be adjusted to the new immobiliser and therefore can no longer be used.

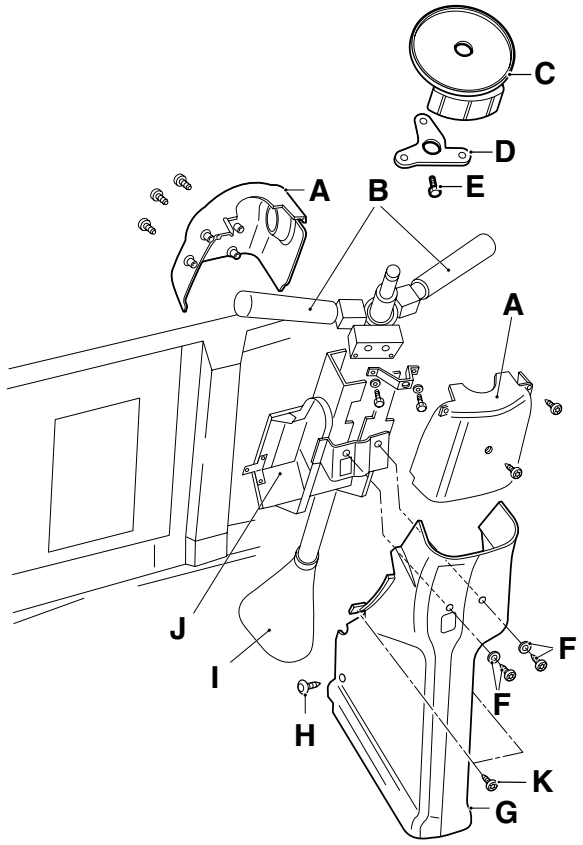
4.23 REMOVAL AND INSTALLATION, STEERING ANGLE SENSOR

Removing steering angle sensor

1. Remove the battery earth clamps.
2. Remove the covers of the steering box (A) right below the steering wheel.
3. Remove the steering wheel.
4. Disconnect the connector from the steering angle sensor (C).
5. Carefully remove the steering angle sensor (C) from the sensor bracket (D).
6. Remove the attachment bolt (E) of the sensor bracket.
7. Remove the sensor bracket (D) from the steering box.

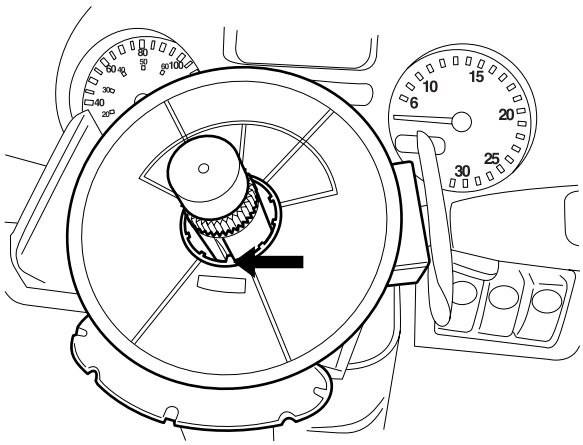
Installing steering angle sensor

1. Fit the sensor bracket to the steering box using the attachment bolt.



K1 01 636

2. Fit the steering angle sensor to the steering shaft. Make sure that the projecting part on the inner ring of the steering angle sensor falls into the groove in the steering shaft. Carefully press the steering angle sensor in the attachment holes in the sensor bracket.
3. Install the connector on the steering angle sensor.
4. Fit the covers.
5. Fit the steering wheel.
6. Attach the earth clamps to the batteries.



K1 01 649

4.24 REMOVAL AND INSTALLATION, DOOR LOCK

Removing door lock

1. Remove the door handle.

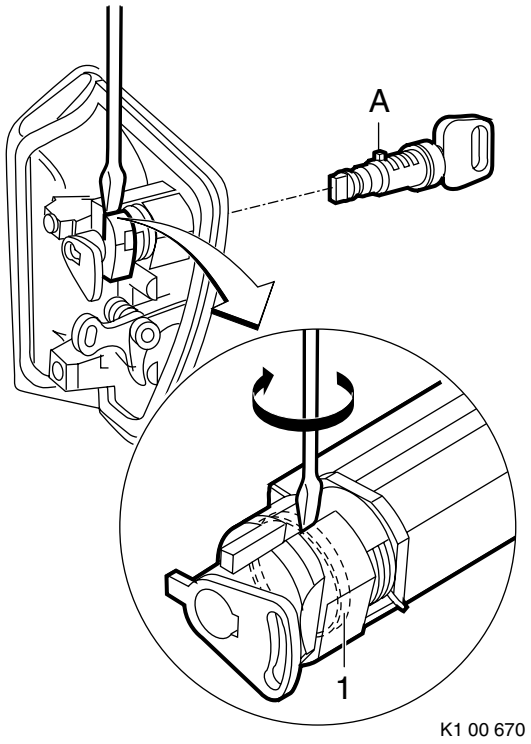
2. Insert the key in the cylinder lock, use a screwdriver to turn the ring (1) outwards and remove the cylinder lock from the door handle.

Installing door lock

1. Turn the ring (1) outwards and position the cylinder lock. Pay attention to the position of the projection (A). Check whether ring (1) makes proper contact.

2. Check the operation of the cylinder lock.

3. Fit the door handle.

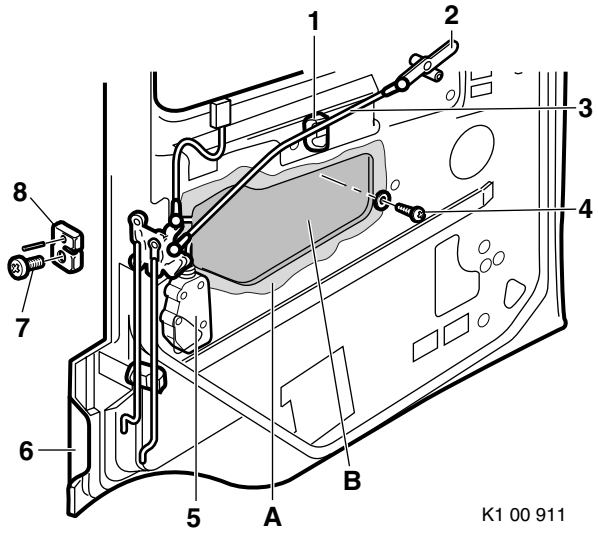


K1 00 670

4.25 REMOVAL AND INSTALLATION, DOOR LOCKING MECHANISM

Removing door locking mechanism

1. Remove the door panel.
2. Remove the foil (A) from the inside of the door.
3. Remove the attachment bolt (4) from the rod guides (1).
4. Remove the attachment bolts from the unlocking handle (2) and put the unlocking handle to one side.
5. Remove the control rod (3) from the unlocking handle.
6. If necessary, remove the locking mechanism from the central door lock (5) and remove it.
7. Remove the attachment bolts (7) from the lock plate and remove the lock plate (8).
8. Take the door lock with the rods and rod guides out of the door through the opening (B).



Installing door locking mechanism

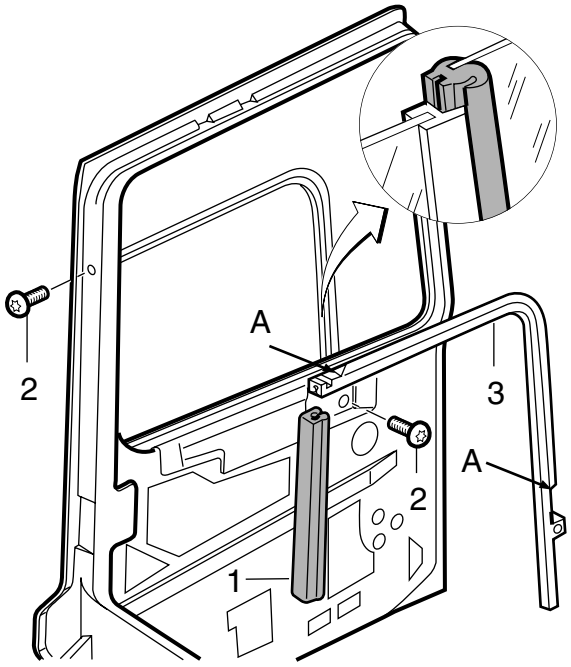
1. Check the length of the rods and adjust them, if necessary. See "Technical data".
2. Put the door lock with the rods and rod guides into the door through the opening (B).

   Note:
   The rods for the handle should run between the door panel and the window mechanism.
3. Fit the lock plate.
4. Fit the control rod for unlocking the door and attach the unlocking handle.
5. If necessary, fit the locking mechanism of the central door locking system.
6. Fit the guides for the unlocking rod.
7. Fit new foil on the inside of the door.
8. Install the door panel.

4.26 REMOVAL AND INSTALLATION, FIXED DOOR WINDOW

Removing fixed door window

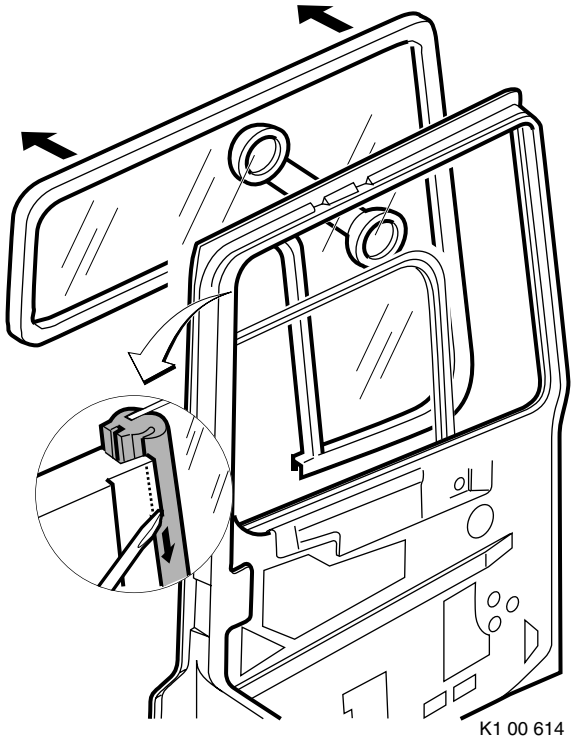
1. Remove the drop glass.
2. Remove the window guide rail (1).
3. Push the inner edge of the weatherstrip on the inside over the groove.
4. Push the window glass with the weatherstrip from the inside to the outside out of the groove.
5. Remove the attachment bolts (2). Push the window frame upwards and remove it by lifting it out of the inside of the door.
6. Remove frayed pieces and granules of old sealant and clean the frame thoroughly with a cleaner.
7. Repair any paint damage in the groove.



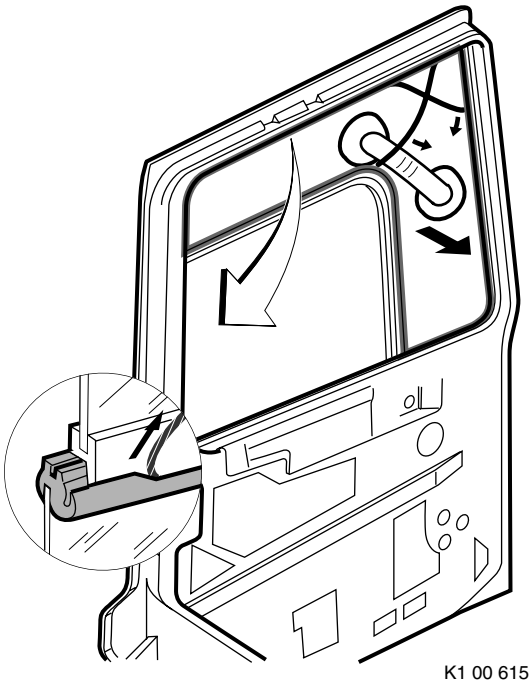
K1 00 906

Installing fixed door window

1. Make sure that the guide rail is smooth and flat (no major irregularities).
2. Check the window glass for damage.
3. Position the window frame (3) in the door frame. Hold the window frame at the curved edge and push it upwards as far as possible until it fits into the inside of the door. Lower the window frame and fit the attachment bolts (2).
4. Apply sealant between the window frame and the sheet metal (A).
5. Fit the weatherstrip around the window glass.


K1 00 614

6. Smear the weatherstrip with a rubber lubricant.
7. Fit the pulling cord.
8. Smear weatherstrip and pulling cord again with lubricant.
9. Insert the window glass from the outside in the frame, using a suction pad. Make sure that the two ends of the cord are at the top and on the inside of the glass.
10. Locate the window glass from the outside in relation to the frame, pressing it firmly to the frame. Now pull the cord while pressing the glass against the frame.
11. Check that the weatherstrip makes a good seal with the whole circumference of the cab body. Knock on the window glass, if necessary.
12. Fit the window guide rail in the door frame.
13. Fit the drop glass.
14. Install the door panel.
15. Clean the two windows (for example with a window cleaning agent) and the parts of the cab body which have become dirty during the fitting of the window.

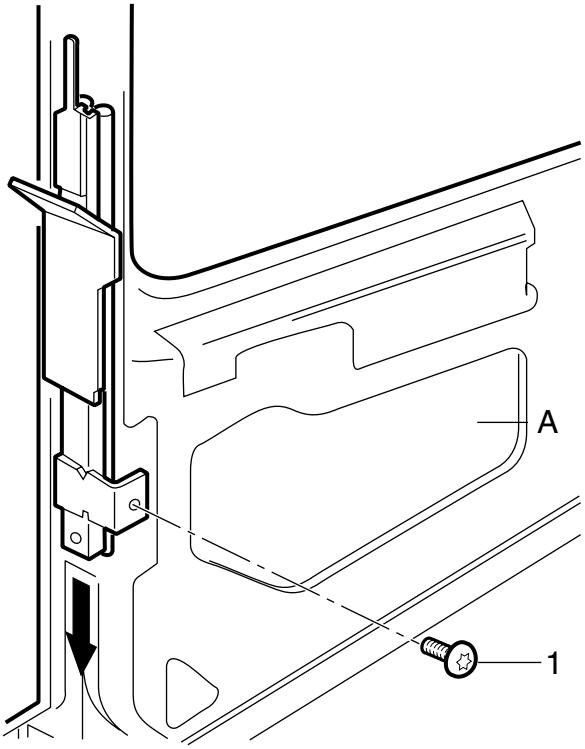


K1 00 615

4.27 REMOVAL AND INSTALLATION, DROP GLASS

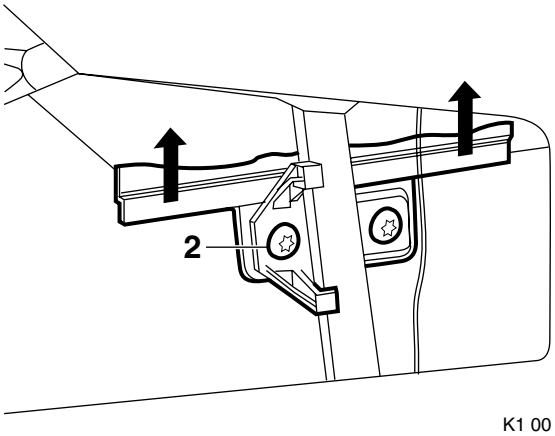
Removing drop glass

1. Remove the door panel and remove the foil at (A).
2. Remove the attachment bolt (1) and remove the window guide.
3. Remove the squeegee strips.



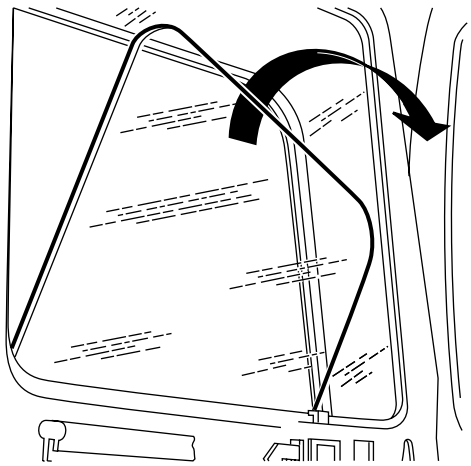
K1 00 910

4. Lower the glass, remove the attachment bolts (2) and lower the mechanism.



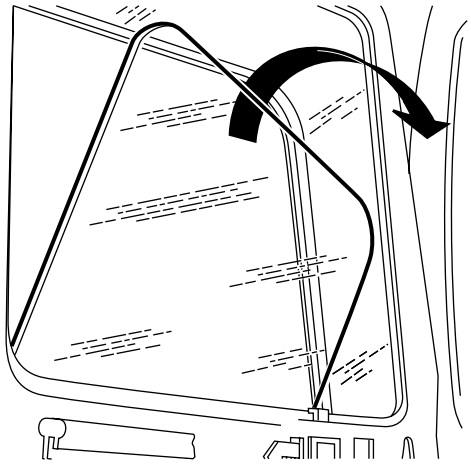
K1 00 907

5. Raise the glass, tilt the window inwards and remove it from the door.

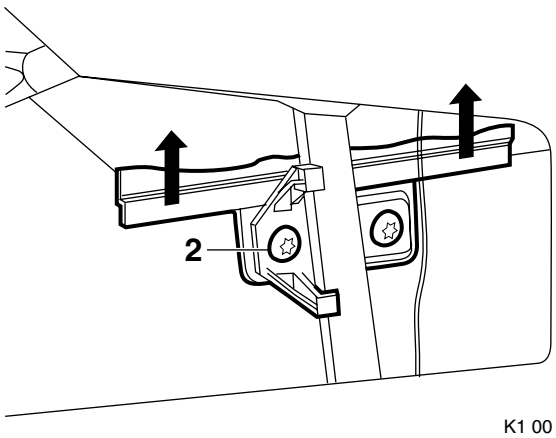

K1 00 612

Installing drop glass

1. Position the drop glass in the door.

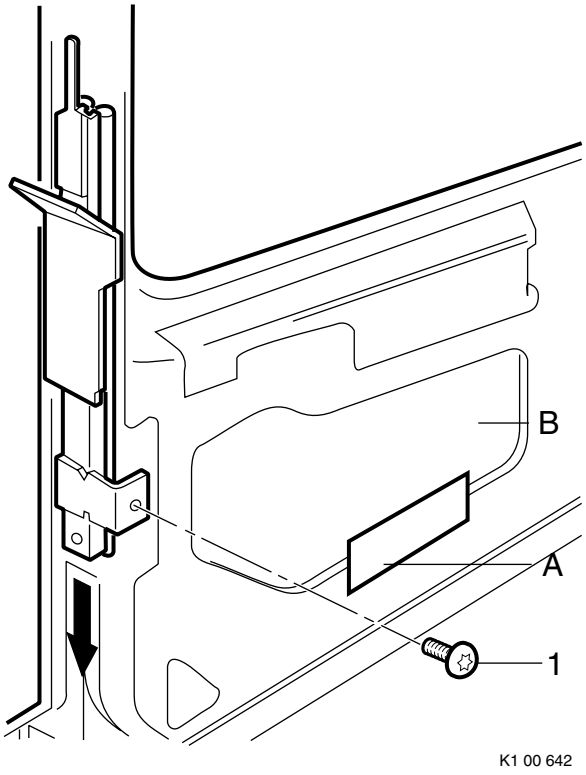

K1 00 612

2. Secure the drop glass to the window mechanism, using the attachment bolts (2).



K1 00 907

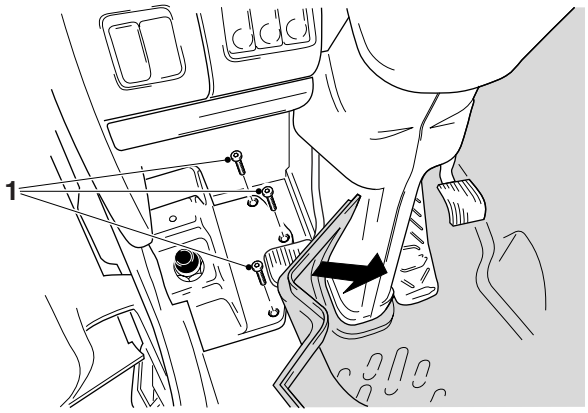
3. Fit the squeegee strips.
4. Position the window guide rail and the attachment bolt (1).
5. Close the glass almost completely. Check whether the top edge of the drop glass is parallel to the window frame. Loosen the attachment bolts (2), if necessary. Move the glass to the correct position and re-tighten the attachment bolts (2).
6. Use tape to attach the foil at (A).
7. Install the door panel.



4.28 REMOVAL AND INSTALLATION, ENGINE BRAKE SWITCH

Removing engine brake switch

1. Remove the cover in the door strut.
2. Put the floor mat to one side.
3. In the RHD version, remove the storage tray from the engine tunnel and the lower dashboard panel with the cigarette lighter.
4. Remove the attachment bolts (1) from the mounting plate and remove the mounting plate with the engine brake switch.
5. Remove the lock nut from the engine brake switch and remove the switch.



K1 00 933

Installing engine brake switch

1. Fit the engine brake switch in the mounting plate and fix it in place with the lock nut.
2. Fit the mounting plate and apply locking compound to the attachment bolts (1) and tighten them to the specified torque. See "Technical data".
3. Fit the dashboard panel and the storage tray on the engine tunnel.
4. Reposition the floor mat.
5. If applicable, fit the cover in the door strut.

4.29 REMOVAL AND INSTALLATION, FLOOR PLATE ON CO-DRIVER SIDE

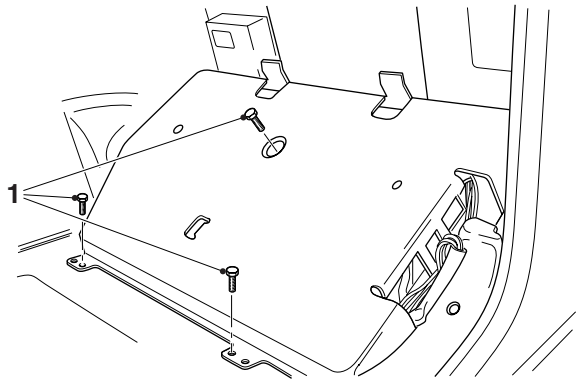
Remove the earth lead from the battery terminal; the steel floor plate may cause a short circuit.

Removing floor plate on co-driver side

1. Remove the cover in the door strut.
2. Put the floor mat to one side.
3. Remove the attachment bolts (1) from the floor plate and remove it.

Installing floor plate on co-driver side

1. Fit the floor plate and secure it using the attachment bolts.
2. Reposition the floor mat.
3. Fit the cover in the door strut.



K1 00 935

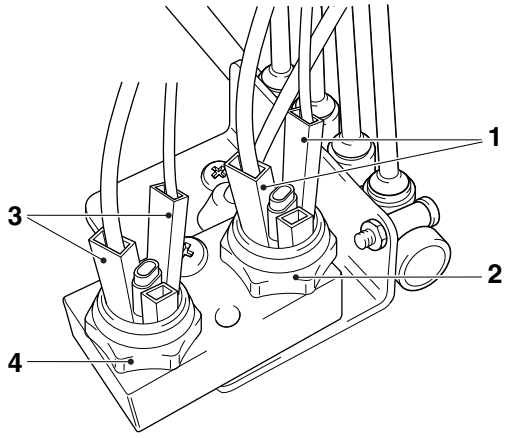
4.30 REMOVAL AND INSTALLATION, PARKING BRAKE SWITCH/BRAKE LIGHT SWITCH

Removing parking brake switch
1. Remove the dashboard panel at the top.
2. Remove the radio panel.
3. Remove the connectors (1).
4. Position the parking brake in the parking position.
5. Remove the switch (2) from the holder.

Installing parking brake switch
1. Fit the switch (2) in the holder.
2. Fit the connectors (1).
3. Fit the radio panel.

Removing brake light switch (conventional braking system)
1. Remove the dashboard panel at the top.
2. Remove the radio panel.
3. Remove the connectors (3).
4. Remove the switch (4) from the holder.

Place the brake light switch (conventional braking system)
1. Fit the switch (4) in the holder.
2. Fit the connectors (3).
3. Fit the radio panel.



K1 01 015

4.31 REMOVAL AND INSTALLATION, HEADLINING

Removing headlining

1. Remove the roof console.

   Note:
   Work on the headlining with clean hands or with clean gloves. Use the correct tools to remove the panel clamps.

2. Remove the sun visor on the co-driver side.

3. Remove the panels above the doors

4. If necessary, remove the cord that operates the valve for the air horn.

5. Remove the roof trim from the roof hatch, disconnect the lighting connector.

6. Remove the panel clamps from the head panel above the driver's position. Lower the head panel and disconnect the connectors.

7. Remove the headlining.

Installing headlining

1. Fit the headlining and fasten it with the panel clamps.

2. Reconnect the lighting and refit the trim on the roof hatch.

3. If necessary, fit the cord that operates the valve for the air horn.

4. Fit the panels above the doors

5. Fit the sun visor on co-driver side.

6. Fit the roof console.

4.32 REMOVAL AND INSTALLATION, REAR WALL LINING

Note:
Use the correct tools to remove the panel clamps.

Removing rear wall lining

1. Remove the panel clamps on the rear wall of the cab.
2. If necessary, remove the thermostat and the clock from the framework using a small screwdriver.
3. Remove the rear wall supports.
4. Remove the (mounting) handle.
5. Remove the rear wall lining, think of the connectors for the sensor for the cab heater and lighting.

Installing rear wall lining

1. Fit the rear wall and fasten it with panel clamps. Think of the connectors for the sensor for the cab heater and lighting.
2. Replace the (mounting) handle.
3. Fit the supports on the rear wall.
4. If applicable, fit the thermostat and clock.
5. If applicable, fit the storage trays.
6. Fit the panel clamp on the rear wall of the cab.

4.33 REMOVAL AND INSTALLATION, SIDE WALL LINING

Removing side wall lining

1. Remove the covers in the door strut.
2. Remove the steel plates that are fixed to the rear wall.
3. If the vehicle has a sleeper cab, then the storage trays under the bed need to be removed.

   Note:
   Use the correct tools to remove the panel clamps.
4. Remove the panel clamps and the side wall lining.

Installing side wall lining

1. Attach the side wall lining with panel clamps.
2. If applicable, fit the storage trays.
3. Fit the steel panels on the side walls.
4. Fit the covers in the door strut.

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4.34 REMOVAL AND INSTALLATION, STORAGE BINS BEHIND SEATS IN SLEEPER CAB

Removing storage trays

1. Remove the wooden bed base.
2. Remove the rear wall panel and the side panels.
3. Remove the attachment bolts in the bottom of the storage trays.
4. Remove the storage tray

Installing storage trays

1. Put the storage trays in place.
2. Fit the attachment bolts in the bottom of the storage trays.
3. Fit the rear wall panels and the side panels.
4. Fit the wooden cover.

2

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3

3

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1. SAFETY INSTRUCTIONS

1.1 SAFETY INSTRUCTIONS

The air conditioning system may only be opened and filled by a specialist. Furthermore, many countries require official certification to carry out such activities.

3

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2. GENERAL

2.1 SYSTEM DESCRIPTION OF HEATER, HEATER CONTROL

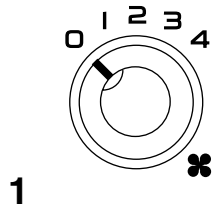
The heater is installed in the central console as a complete unit.

There are two versions available for the F230 cab:

- Heating/ventilation system
- Heating/ventilation system combined with air conditioning.

The control panel has three rotary knobs.

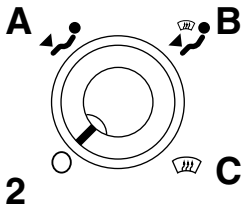
Knob 1
Five-position switch to control fan speed.



K100395

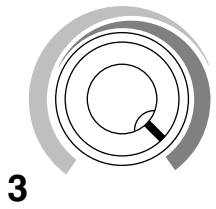
Knob 2
Air distribution in the cab.

0 = 0 position (leg area and windscreen closed)
A = leg area
B = windscreen and leg area
C = windscreen (demister)



K1 01 126

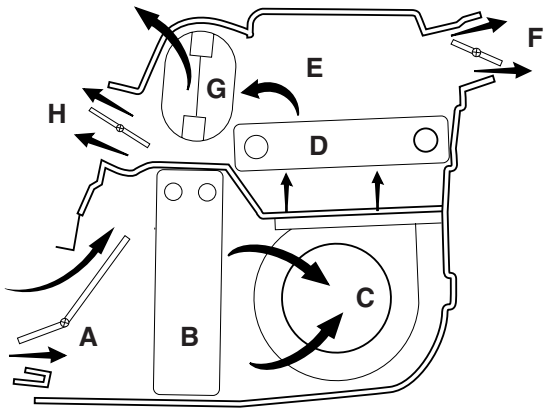
Knob 3
Temperature control: offers a continuously variable supply of hot air from 0 to 100%.



K100397

Air distribution
Optimal air distribution in the cab can be achieved by means of knob 2 in combination with the rotating and adjustable vents on the central console and at the sides of the dashboard.

After passing through an air filter, outside air enters the heater housing through recirculation valve (A). Incoming air passes over the evaporator (B) of the air conditioning (if present) to the heater fan (C). The air is guided through the heater radiator (D) and in the manifold (E) it is guided to the vents on the central console (F), the regulating valve (H) for the windscreen demisting and the regulating valves (G) for the floor and door heating.



K1 00 993

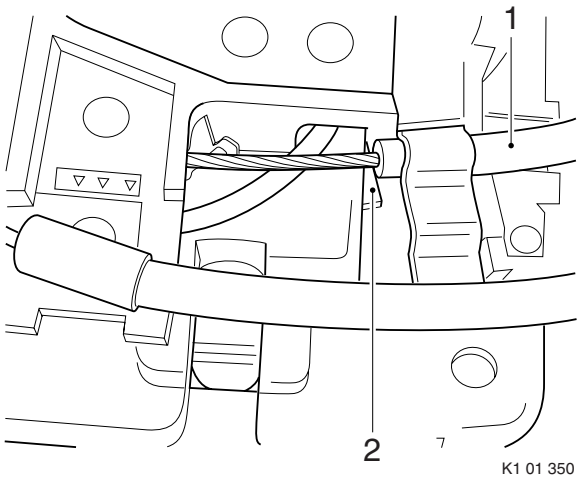
3. INSPECTION AND ADJUSTMENT

3.1 INSPECTION AND ADJUSTMENT, HEATER VALVE

Inspecting heater valve

1. Remove the heater control panel.

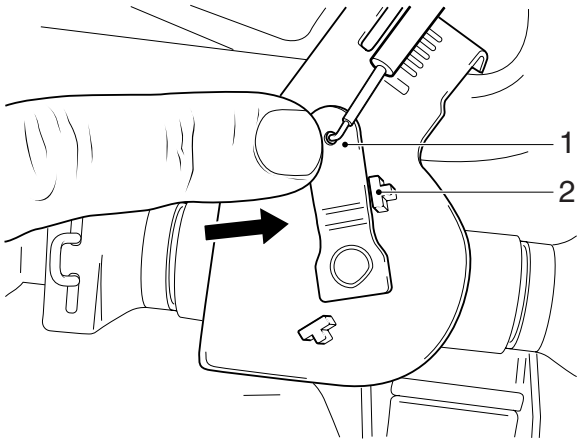
2. Turn the temperature knob on the control panel fully counterclockwise (cold). Check at the rear of the control panel that the bowden cable (1) (red for LHD and blue for RHD) abuts against the stop (2).



K1 01 350

3. Turn the control knob fully clockwise (warm) once and fully counterclockwise again (cold). Check that the control arm (1) of the heater valve abuts fully against the stop (2).
If this is not the case, the heater valve must be adjusted.

4. Fit the heater control panel.

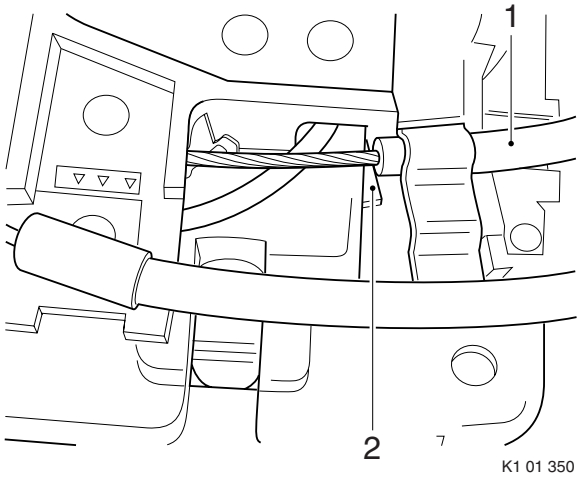


K1 01 352

Adjusting the heater valve

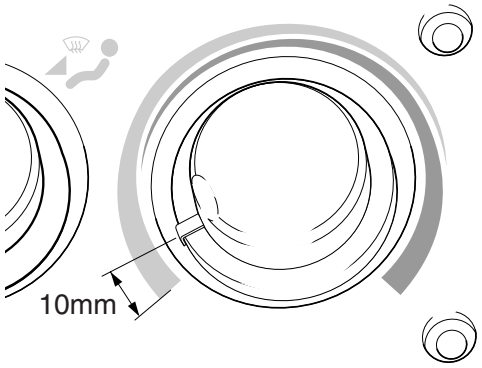
1. Remove the heater control panel.

2. Turn the temperature knob on the control panel fully counterclockwise (cold). Remove the fastening clip and press the bowden cable (1) against the stop (2) and fit the fastening clip.



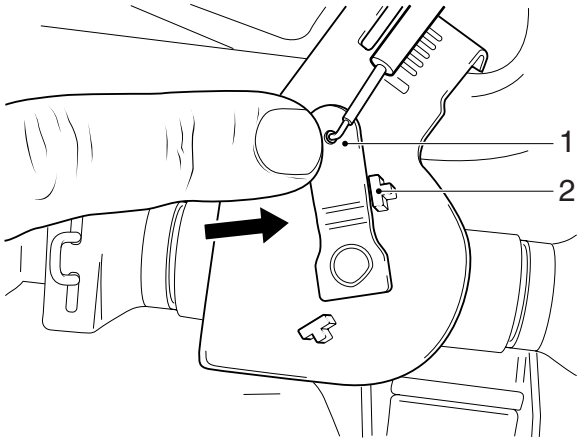
K1 01 350

3. Turn the temperature knob fully counterclockwise (cold) and then 10 mm clockwise (warm).



K1 01 351

4. Take the fastening clip off the bowden cable and remove the heater valve.
5. Press the control arm (1) of the heater valve against the stop (2) and fit the fastening clip.
6. Turn the control knob fully clockwise (warm) once and fully counterclockwise again (cold). Check that the control arm of the heater valve abuts fully against the stop.
7. Fit the heater control panel.



K1 01 352

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4. REMOVAL AND INSTALLATION

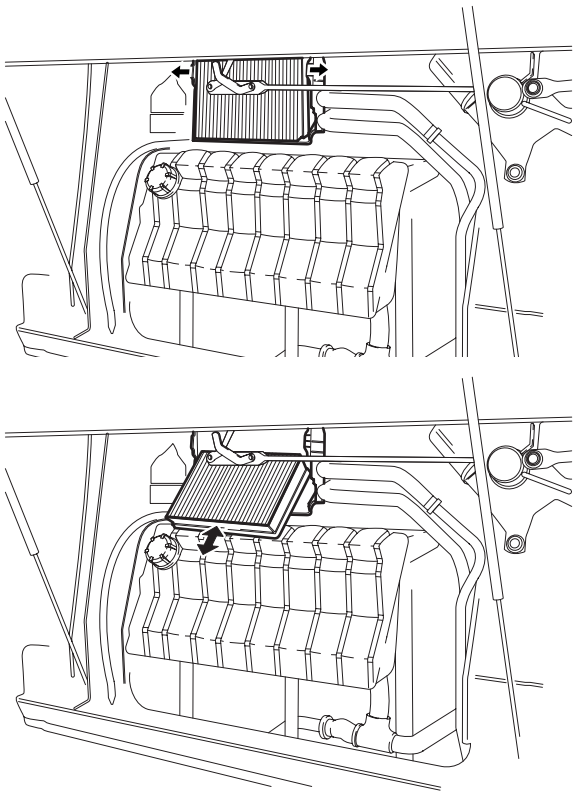
4.1 REMOVAL AND INSTALLATION, INTERIOR FILTER

Removing interior filter

1. Open the grille.
2. Push the locknut on the filter casing to one side and remove the filter element.

Fitting interior filter

1. Fit the filter element.
2. Push the filter element into the locknut on the filter casing.
3. Close the grille.

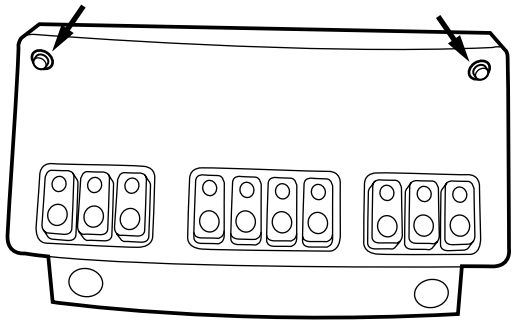


K1 01 033

4.2 REMOVAL AND INSTALLATION, HEATER UNIT

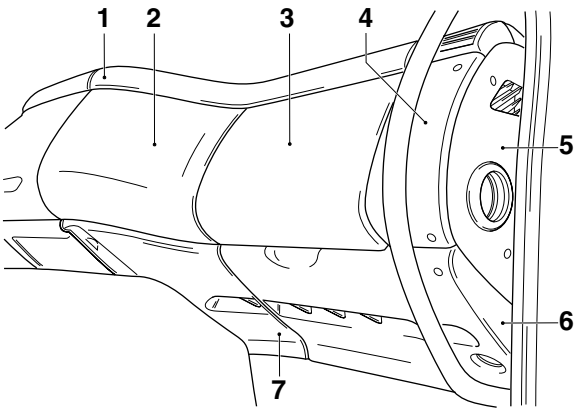
Removing heater unit

1. Remove the central console control panel.



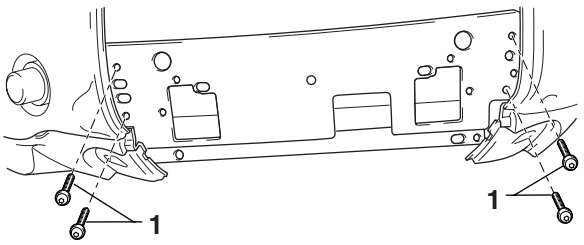
K1 00 927

2. Remove the dashboard panel (1) at the top.
3. Remove the dashboard panels (2 to 7) on co-driver side.



K1 01 068

4. Remove the attachment bolts (1) from the steel connecting piece of both dashboard frames.



K1 01 099

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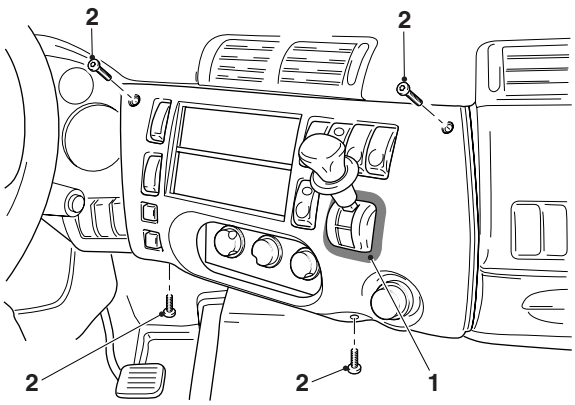
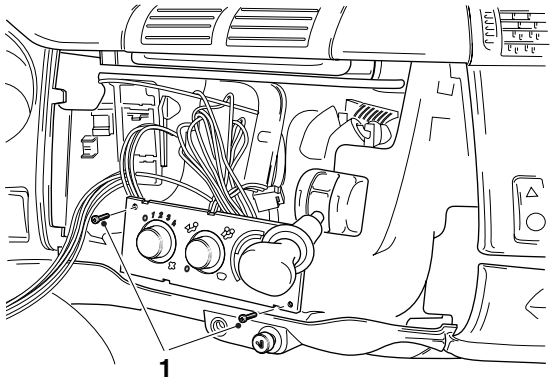
5. Remove the grommet (1) and the attachment bolts (2). Remove the radio panel.



K1 00 934

6. Remove the attachment bolts (1) from the heater control panel and put it to one side.



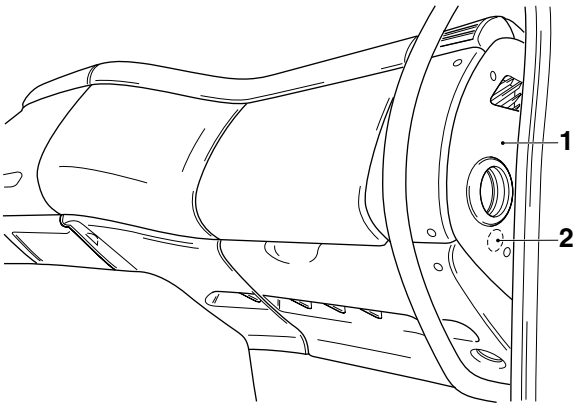
K1 00 944

Note:
When removing the entire heater unit it may be necessary to remove an air pipe from the parking brake valve.

7. Remove the dashboard panel (1) and remove the panel clamp (2) that is behind the dashboard panel (1).

8. Remove the attachment bolts from the foot air duct and remove the right part of the air duct from below.

9. Remove the left part of the air duct that is still attached to the heater.

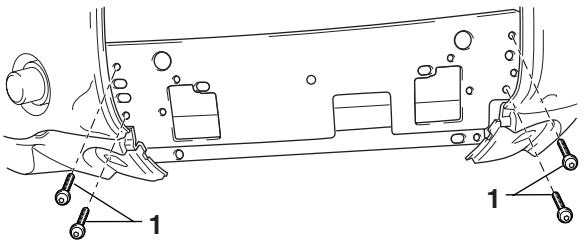


K1 01 127

10. Remove the attachment bolts (1) from the steel connecting piece of both dashboard frames.

11. Remove the attachment bolts from the central box and put it to one side.

12. Remove the attachment bolts from the steel frame over the central box and remove the frame.



K1 01 099

Note:
If the vehicle has air conditioning fitted, any work done on that must be done by a qualified person.

13. Partially drain the coolant.

14. If relevant, empty the air conditioning unit.

15. Remove the coolant hoses and, if relevant, the air conditioning pipes at the front of the cab. Block off the connections to the coolant hoses to prevent any coolant escaping into the cab.

16. Remove the interior filter and remove the plastic filter casing from the interior filter.

17. Remove the bolts from the heater fixings at the front of the cab (exterior).

18. Remove the attachment bolts from the heater fixings on the engine tunnel.

Note:
At the front of the heater, through the bulkhead, is the condensation drain for the air conditioning. If the heater is not first moved straight backwards (± 3 cm) and then removed sidewards, this condensation drain will break off.

19. Remove the connector from the heater.

20. Remove the heater unit.

Installing heater unit

1. Fit the heater unit from the side and then move it the last 3 cm straight back towards the bulkhead.

2. Fasten the heater unit in place with attachment bolts on the engine tunnel and on the exterior of the bulkhead.

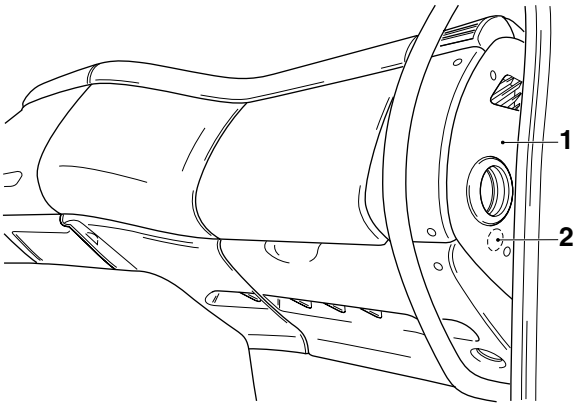
3. Attach the heater connector.

4. Remove the blocks from the coolant hoses and attach the hoses.

5. If applicable, fit the air conditioning pipes at the front of the cab.

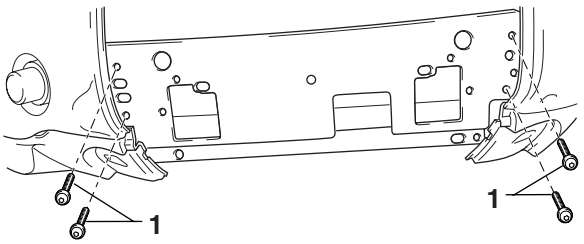
6. Fit the plastic filter casing of the interior filter and fit the interior filter.

7. Fit the air ducts. Fix these under the central box with the attachment bolts and at the end with the panel clamp (2). Fit the dashboard panel (1).



K1 01 127

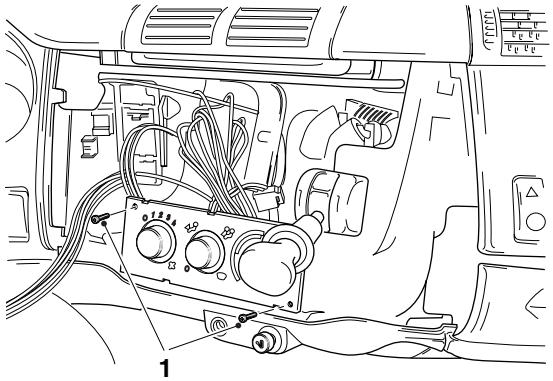
8. Fit the steel joining piece between the dashboard frames. Attach with the attachment bolts (1).



K1 01 099

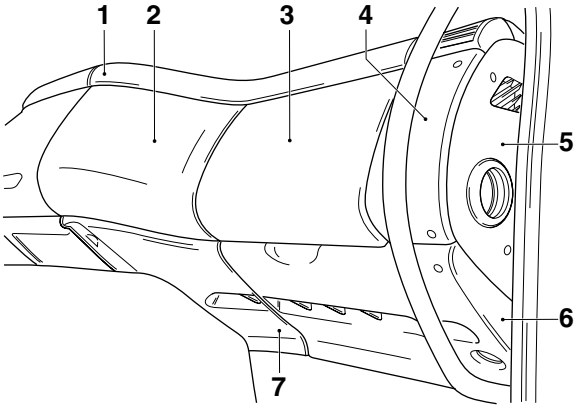
9. Put the control panel in place and fasten it with the attachment bolts (1).

10. Fit the radio panel.



K1 00 944

11. Fit the dashboard panels (2 to 7) on co-driver side.
12. Fit the dashboard panel (1) at the top
13. Fit the dashboard panel on the central console.
14. Fit the storage tray on the engine tunnel.
15. Fill the cooling system.
16. If applicable, fill the air conditioning system.



K1 01 068

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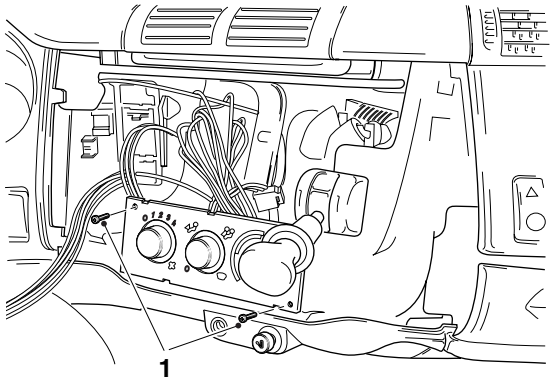
4.3 REMOVAL AND INSTALLATION, HEATER CONTROL PANEL

Removing control panel

1. Turn all control knobs fully counterclockwise (0 and cold respectively).
2. Remove the radio panel.
3. Remove the attachment bolts (1) from the control panel.

   Note:
   If the heater unit is removed: Remove the attachment bolts from the control panel and put the panel to one side. Do not disconnect the control cables.
4. Remove the control panel from the frame and turn the panel until the control cables can be reached.
5. Remove the clips from the control cables.
6. Remove the control cables.
7. Disconnect all electrical connections.
8. Remove the control panel.

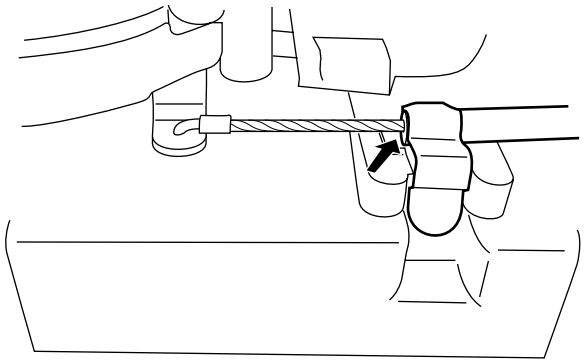


K1 00 944

Installing control panel

1. Turn all control knobs fully counterclockwise (0 and cold respectively).

   Note:
   For the colours of the control cables for the heater refer to "Technical data".
2. Attach one side of the control cable of the foot valve to the innermost lever of the heater manifold, push the outer cable against the white stop and fix the clip.



K1 01 149

3. Attach one side of the control cable of the defroster valve to the outermost lever of the heater manifold, push the outer cable against the stop and fix the clip.

4. Attach one side of the Bowden cable of the water tap to the temperature control lever, push the outer cable against the stop and fix the clip.

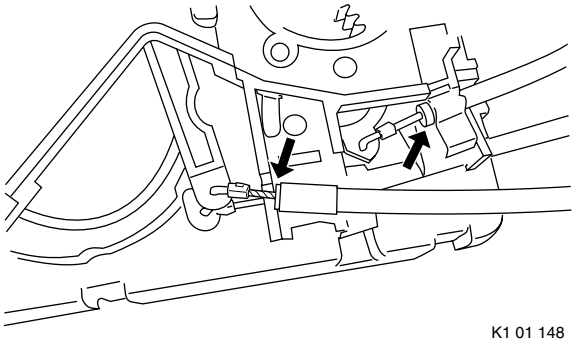
5. Close the valve or tap completely.

6. Put the clip on the outer cable, positioning the outer cable so that the valve or tap is just pushed closed.

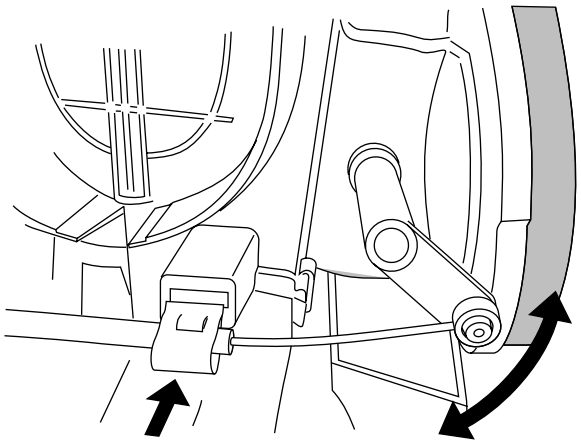
7. Check the settings by setting the control knobs to various positions. In the zero position the relevant valve or tap must be closed and the knob must be easily adjustable over its entire range.

8. Reconnect all electrical connections.

9. Fit the control panel and the radio panel.



K1 01 148

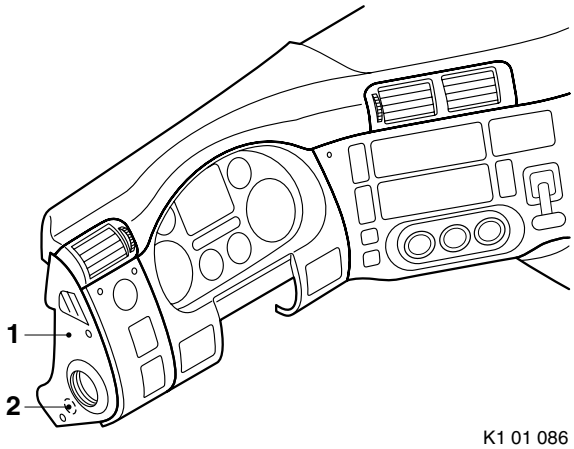


K1 01 150

4.4 REMOVAL AND INSTALLATION, HEATER RADIATOR

Removing heater radiator

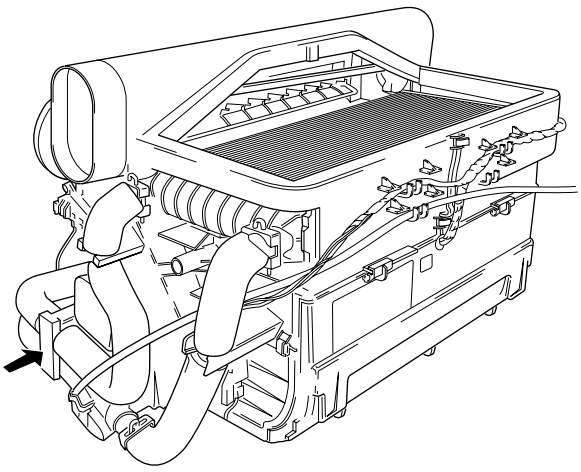
1. Remove the dashboard panel at the top.
2. Remove the radio panel.
3. Remove from the underside the panels to the left and right of the steering column.
4. Remove the attachment bolts from the air duct.
5. Remove the air duct from the underside.
6. Remove the panel clamp (2) that is behind the dashboard panel (1).



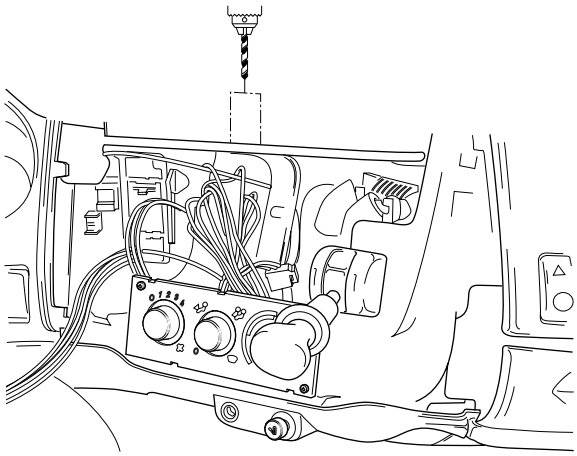
K1 01 086

7. Partially drain the coolant.
8. Remove the clips from the hoses.
9. Remove the clip from the aluminium pipes.

   Note:
   Pull the aluminium pipes first straight back before making a turning movement.

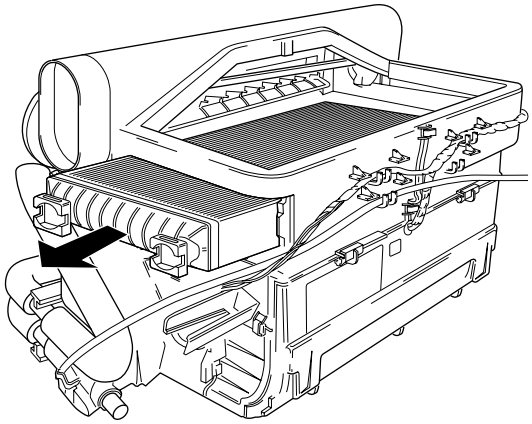

K1 01 140

10. Put the aluminium pipes to one side.
11. Drill out the pop rivets from the support and push the support backwards.



K1 01 143

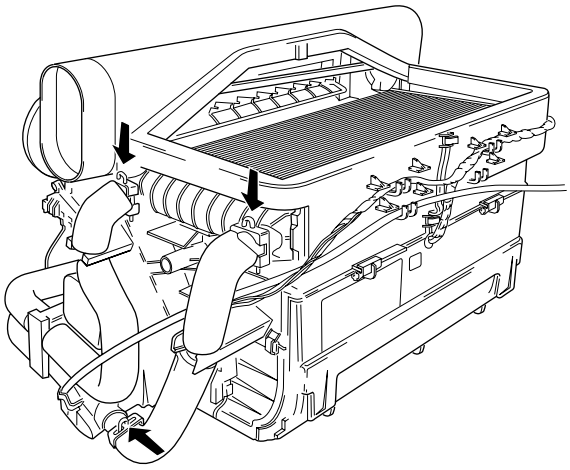
12. Remove the heater radiator from the heating unit.



K1 01 139

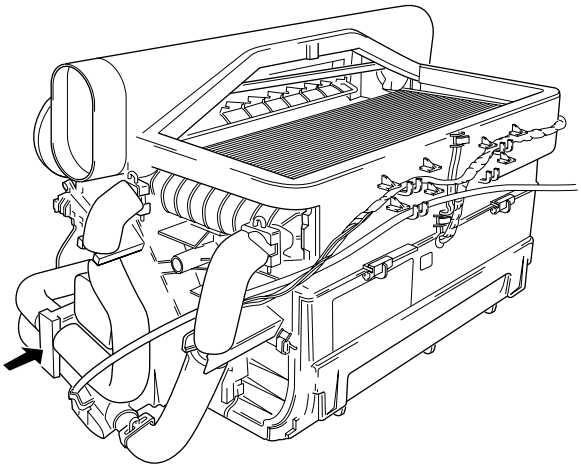
Installing heating radiator

1. Install the heater radiator in the heating unit.
2. Fit the support behind the radio panel and fix it with pop rivets.
3. Put new O-rings on the aluminium pipes.
4. Install the aluminium pipes and secure them using the clips.



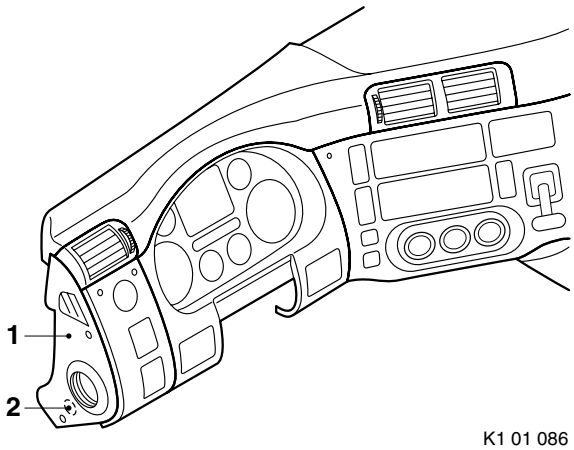
K1 01 138

5. Clamp the pipes in place.



K1 01 140

6. Reconnect the air duct to the heating unit.
7. Attach the air duct at the bottom with the attachment bolts and fix the panel clamp (2) to the outer end.
8. Fit the dashboard panel (1).
9. Fasten the support behind the radio panel with pop rivets.
10. Fit the radio panel.
11. Fit the dashboard panel at the top.

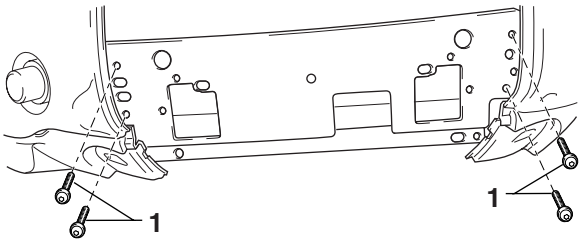


K1 01 086

4.5 REMOVAL AND INSTALLATION, ELECTRIC MOTOR FOR HEATING UNIT

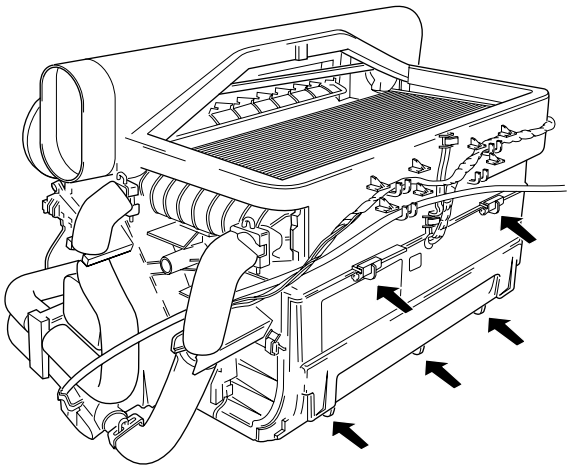
Removing electric motor for heating unit

1. Remove the panel underneath the ashtray, the ashtray and the ashtray holder.
2. Remove the central console control panel.
3. Remove the connector of the heating unit.
4. Remove the attachment bolts (1) from the steel connecting piece of both dashboard frames.



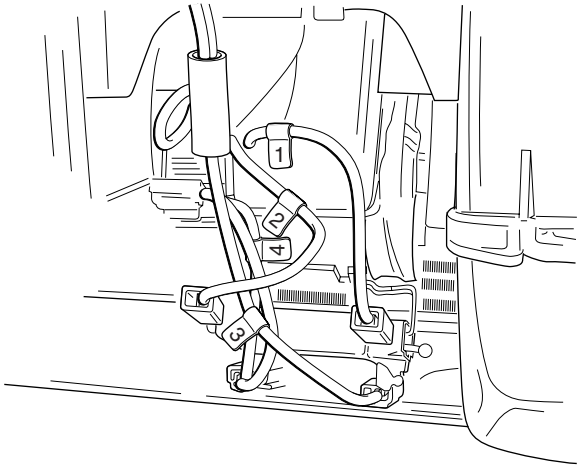
K1 01 099

5. Slide the sliding sections to the right and remove the lid.



K1 01 130

6. Mark the connectors before removing them from the series resistor, if there are not already any wire markings.

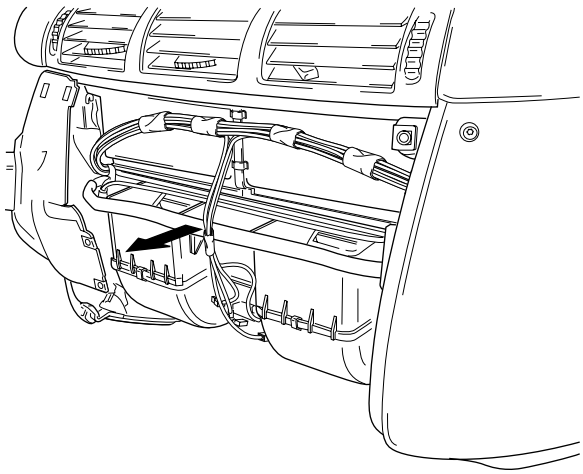


K1 01 142

7. Remove the heater motor completely with housing and series resistor from the heating unit.

8. Remove both covers of the heater housing.

9. Remove the attachment screws from the bracket over the heater motor and remove the motor from the housing.



K1 01 098

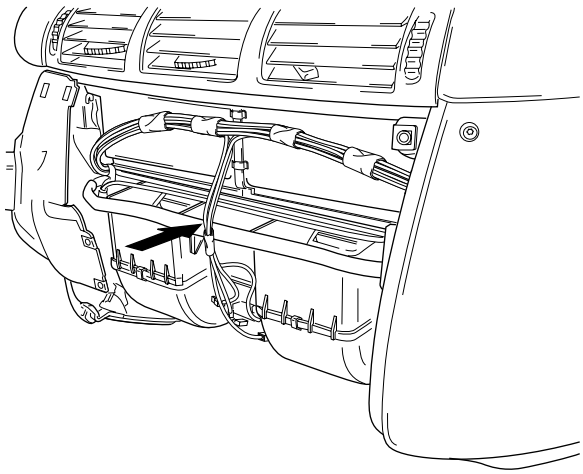
Installing electric motor for heating unit

1. Install the heater motor.

2. Fix the bracket around the heater motor in place with the attachment screws.

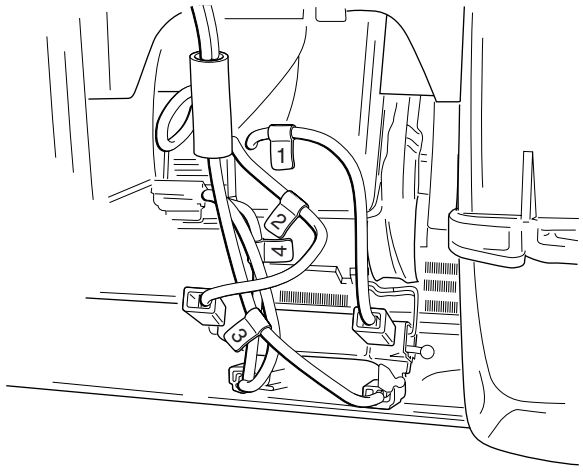
3. Fit both covers on the heater motor housing.

4. Push the heater motor together with the series resistor and housing into the heating unit.



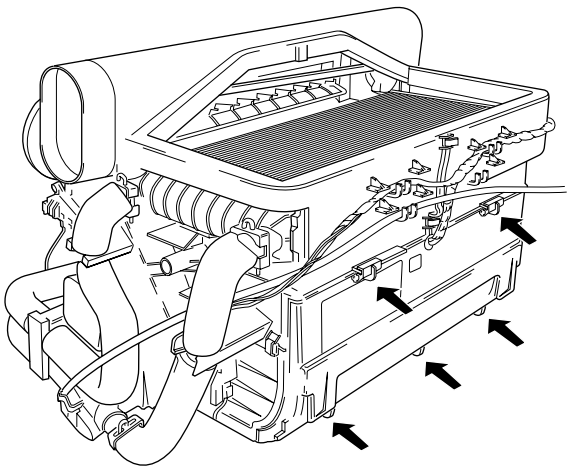
K1 01 137

5. Reconnect the series resistor as shown. Note the markings or the wire numbers.



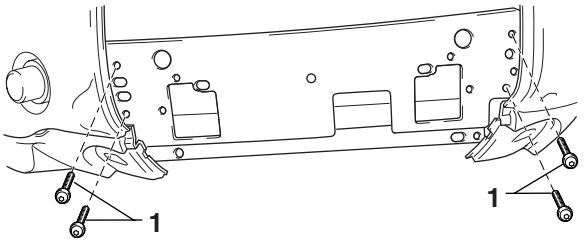
K1 01 142

6. First hook the heater motor cover behind the sliding bits at the top and then push the bottom into place. Slide the sliding sections to the left.



K1 01 130

7. Fit the steel joining piece of both dashboard frames and fasten it with the attachment bolts (1).
8. Attach the heating unit connector.
9. Fit the control panel on the central console.
10. Fit the panel underneath the ashtray, the ashtray and the ashtray holder.



K1 01 099

4.6 REMOVAL AND INSTALLATION, RECIRCULATION VALVE CONTROL

Removing recirculation valve control

1. Remove the radio panel.

   Note:
   In a RHD vehicle remove the dashboard panels on co-driver side.

2. Remove the foot air duct on driver side.

3. Remove the connector to the recirculation valve control.

4. Remove the attachment bolts (1) from the recirculation valve control.

5. Remove the recirculation valve control (2).

Installing recirculation valve control

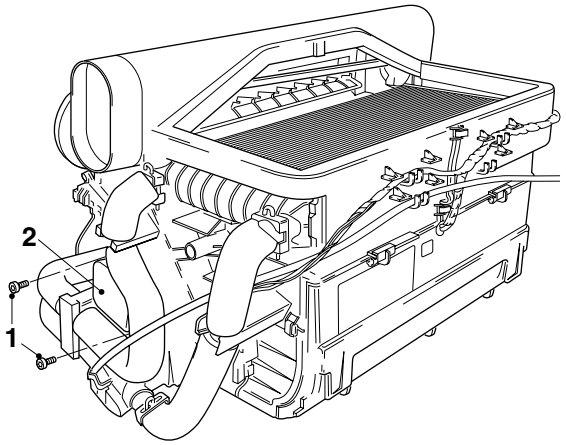
1. Install the recirculation valve control (2) and secure it using attachment bolts (1).

2. Fit the connector.

3. Fit the foot air duct.

4. Fit the steering column panels underneath the steering column (left and right).

5. Fit the radio panel.

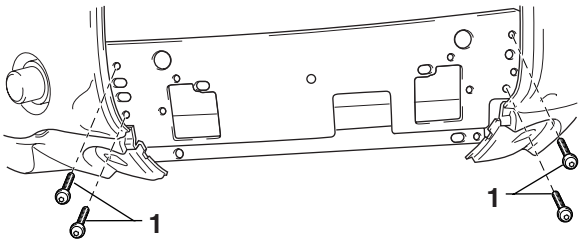


K1 01 141

4.7 REMOVAL AND INSTALLATION, SERIES RESISTOR

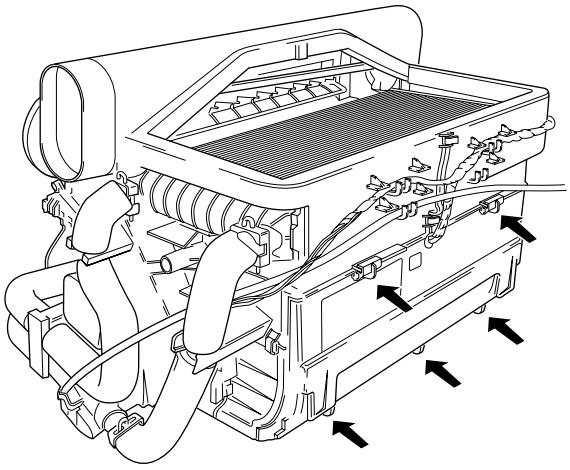
Removing series resistor

1. Remove the storage tray from the engine tunnel.
2. Remove the panel underneath the ashtray, the ashtray and the ashtray holder.
3. Remove the central console control panel.
4. Remove the attachment bolts (1) from the steel connecting piece of both dashboard frames



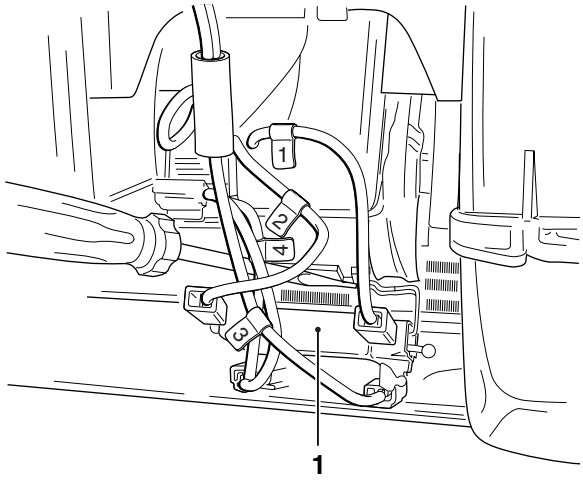
K1 01 099

5. Slide the sliding sections to the right and remove the lid.



K1 01 130

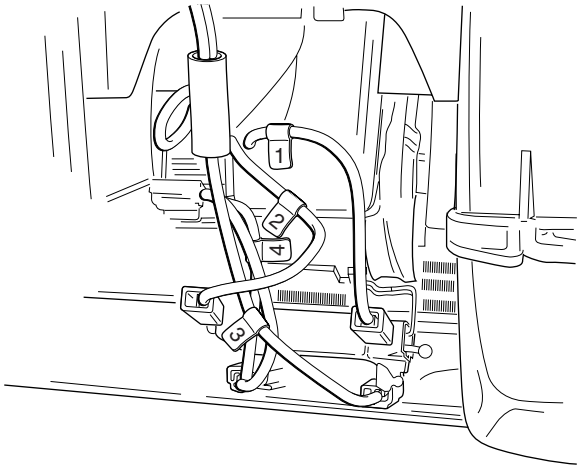
6. Remove the connectors from the series resistor (1).
7. Using a screwdriver push the lock to one side and remove the series resistor (1) including its support.



K1 01 096

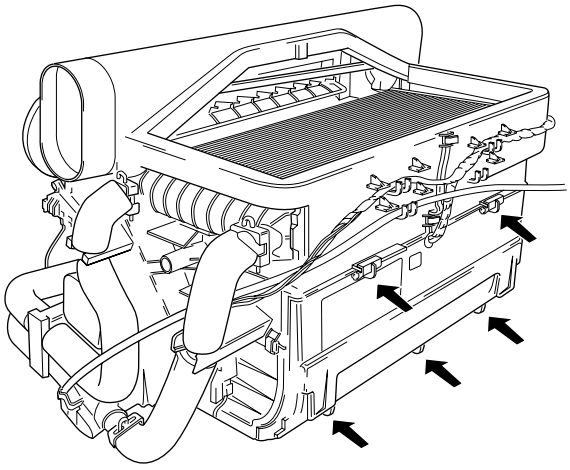
Installing series resistor

1. Push the series resistor into place, including its support.
2. Fit the connectors. Note the markings or the wire numbers.



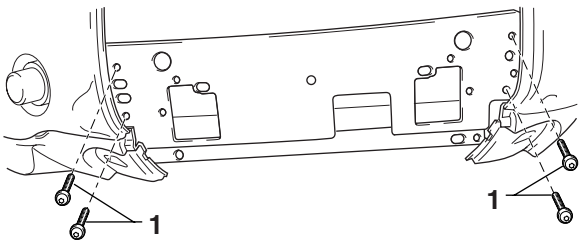
K1 01 142

3. Slide the sliding sections to the left.



K1 01 130

4. Fit the steel connecting piece of both dashboard frames and fasten it with the attachment bolts (1)
5. Fit the panel underneath the ashtray, the ashtray and the ashtray holder.
6. Fit the control panel on the central console.
7. Fit the storage tray on the engine tunnel.



K1 01 099

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1. SAFETY INSTRUCTIONS

1.1 SAFETY INSTRUCTIONS

General
The cab is equipped with a hydraulic tilting mechanism. The pump is located on co-driver's side at the rear of the cab. The cab locks are opened hydraulically during pumping.

Before tilting the cab, make sure that the doors are closed, that there are no loose items in the cab and that the gear lever is in neutral. Tilt the cab fully forward if work must be carried out underneath the cab.

You can stop the cab tilting forward at any time by turning the cock to the reverse tilting position.

When working on a tilted cab (for example when welding, spray-painting or applying bitumen coatings), be sure to cover the piston rod of the lifting cylinder. Welding spatter and paint on the piston rod will inevitably cause damage to the oil seal.

Inspection after a collision
Before tilting the cab after a collision, check the cab rests, the cab hinges and the attachment of the lifting cylinder to the chassis member and cab for cracks.

If the vehicle has been involved in a collision, the cab must under no circumstances be tilted without due precautions. The end stop in the lifting cylinder may be damaged, which might cause the cab to shoot past its end stop.

If possible, suspend the cab in slings and put a stand in front of the cab. Make sure that there is no one in front of the cab while it is being tilted.

After a collision, **always** check the lifting cylinder for internal damage. Replace the lifting cylinder if damaged or if in doubt.

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2. GENERAL

2.1 DESCRIPTION OF EXTERIOR MIRRORS

All exterior mirrors and exterior mirror arms used are factory set for average driving conditions. After the superstructure has been constructed on the vehicle, it is required by law that all exterior mirrors and exterior mirror arms should be re-adjusted in accordance with EC Directive 88/321. This critical adjustment depends entirely on the width of the vehicle's superstructure.

To ensure proper adjustment of the exterior mirror/exterior mirror arms as provided for in the Directive, it is important to follow all adjustment procedures closely.

Mirror classification
This section describes the different types of vehicle exterior mirrors according to the standard EC mirror classification. The following vehicle mirror categories apply to trucks over 7.5 tonnes:

"Category 2" - Main exterior mirror
"Category 4" - Wide-angle mirror (/dead angle exterior mirror)
"Category 5" - Close-up exterior mirror

Note: Category 1 (interior) and category 3 (exterior) mirrors are intended for passenger cars.

The exterior mirror consists of convex glass and an aerodynamically shaped mirror housing. The main exterior mirror and wide-angle exterior mirror (only on co-driver side) are fitted to a D-shaped arm on the door.
A dead angle exterior mirror can also be fitted on the D-shaped arm, depending on national legal regulations. Amongst other things, the dead angle exterior mirror gives vision of the section beside the vehicle that is outside the fields of vision of the main exterior mirror, the wide-angle exterior mirror and the pavement mirror.
The pavement mirror is attached to the upper part of the door on a separate bracket. The mirror bracket returns to its original position if it gets flapped back. On several models there is an extra mirror on co-driver side giving the driver a better view of the trailer.

The heating for the exterior mirrors can be switched on by a switch on the dashboard. When the exterior mirror heating is switched on a white mark is visible on the switch.

The exterior mirrors can be subdivided into:

- Non-heated mirrors
- Heated exterior mirrors (except for the pavement mirror)
- Electrically adjustable main exterior mirrors (always heated).

2.2 DESCRIPTION OF WINDSCREEN WIPER AND WASHERS

There are two windscreen wipers on the windscreen which are equipped with nozzle tips, each of which has three sprayer nozzles.

The reservoir for the windscreen washers is in the wheel arch on the right-hand side of the vehicle. The filling point is at the front behind the grille.

2.3 DESCRIPTION OF HEADLIGHT LEVELLING

The cab is equipped with an internal device for adjusting the angle of the headlight beam. Control is by a rotary knob located in the cab. The headlights are levelled by electric motors located in the headlight unit.

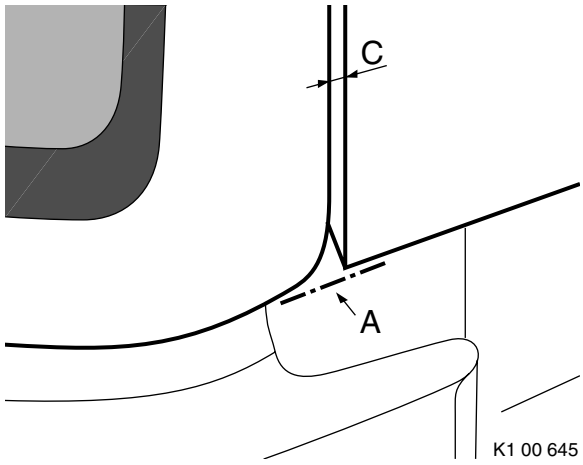
3. INSPECTION AND ADJUSTMENT

3.1 ADJUSTING DOORS

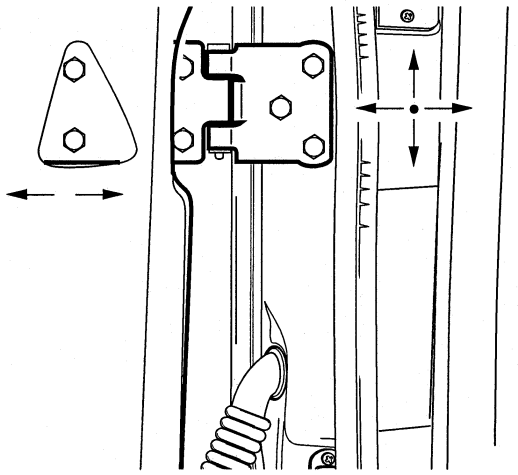
1. Check whether the gaps marked (C) (see "Technical data") to the left and right of the door are equally wide. If necessary, adjust the door, with the door hinges, ensuring that the gaps are equally wide.

2. Check that the bottom of the door aligns with the bottom of the corner section at A, and with the cab body at B. If necessary, adjust the door, with the door hinges.

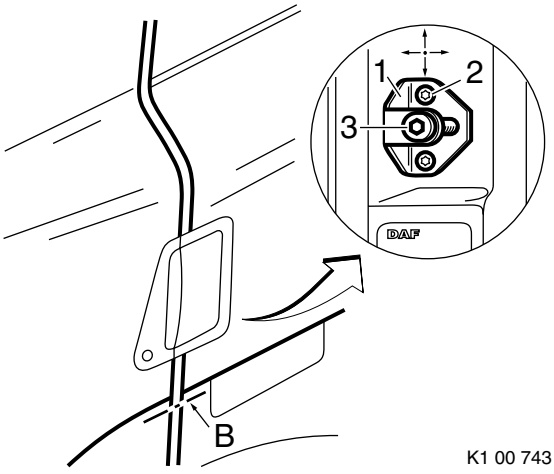
3. Look and feel whether there is a smooth transition between the door and corner section and between the door and roof. If necessary, adjust the door inwards or outwards with the door hinges



K1 00 645


K1 00 644

4. Check that the surface of the door handle area continues smoothly into that of the cab body, see "Technical data". If necessary, adjust the door, using the striker plate (1). Loosen the Torx screws (2) and socket head screw (3) and move the striker plate. For the tightening torques of the Torx screws, see "Technical data".

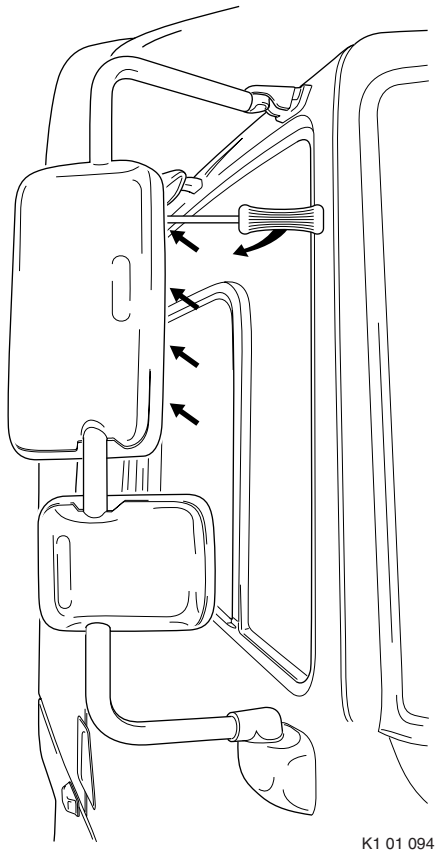


K1 00 743

3.2 INSPECTION AND ADJUSTMENT, EXTERIOR MIRRORS

Height/angle adjustment of exterior mirrors
Check that the driver and co-driver exterior mirrors have been adjusted to the values stated in 'Technical data'. If necessary, adjust the height and/or angle as follows:

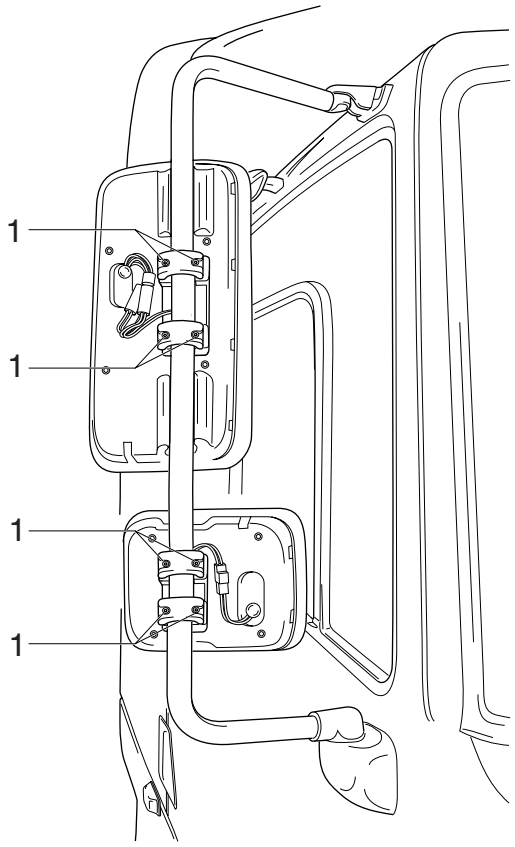
1. Remove the cover panel on the back of the exterior mirror. This panel can be loosened by sticking a wide screwdriver into the openings (do not turn it) and moving the screwdriver backwards.


K1 01 094

2. Unscrew the clamping bracket bolts (1). This allows the mirrors to move freely over the bracket.

3. Position the mirror at the proper height and angle (see 'Technical data').

4. Tighten the clamping bracket bolts (1).



K1 01 095

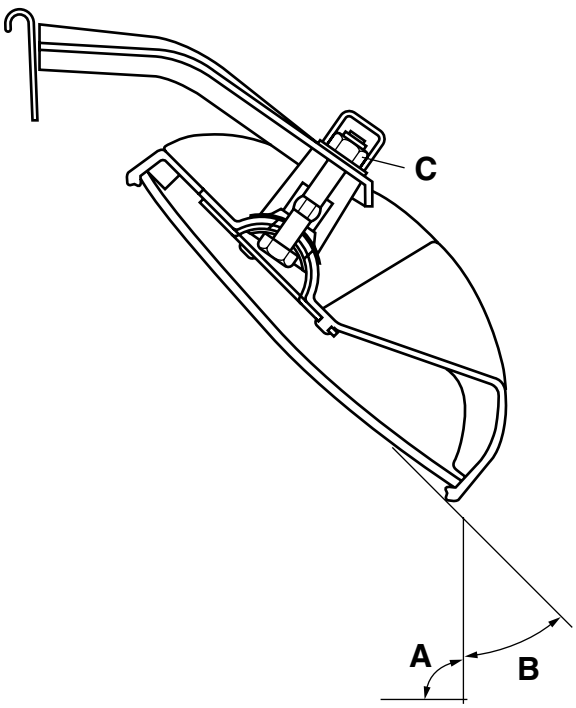
Adjusting the pavement mirror

1. Remove the cap of adjusting nut (C) at the top of the mirror.

2. Slacken the nut a few turns until the mirror can move freely.

3. Adjust the mirror until it forms a right angle (angle A) to the floor (angle B = 45°). Lengthways the mirror should run parallel to the side of the vehicle.

4. Tighten the bolts to the specified tightening torque. See "Technical data".



K100236

3.3 INSPECTION AND ADJUSTMENT, HEADLIGHTS

Note:
Use adjustment equipment to check and adjust the headlights.

Adjusting the headlights

1. Prior to adjusting the headlights, check that:
   - the vehicle is unladen and the tyres are inflated to the specified pressure.
   - the vehicle is standing on a flat and level surface.
   - the height adjustment of the headlights inside the cab is in "0" position.

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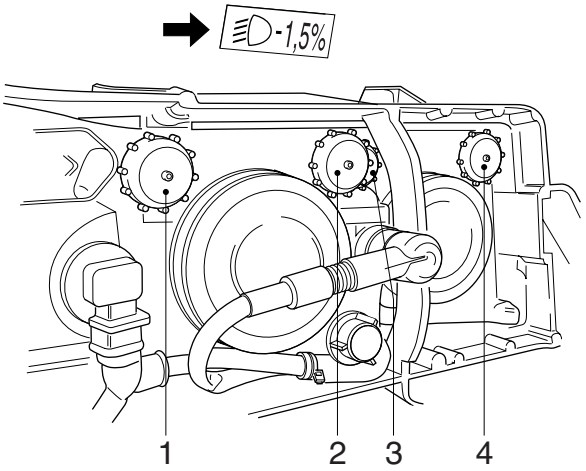
2. The headlight is adjustable by means of four knurled knobs at the back of the headlight housing; main beam and dipped beam are separately adjustable:
   - To adjust the dipped beam horizontally turn knob 1.
   - To adjust the dipped beam vertically turn knob 2.
   - To adjust the main beam vertically turn knob 3.
   - To adjust the main beam horizontally turn knob 4.

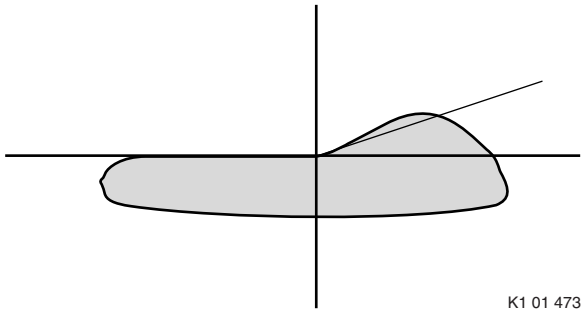
   The specified height adjustment is also shown on a sticker on the inside of the corner section around the headlight.



K1 01 354

3. As clear headlight glass is used the image of the asymmetrical light beam deviates somewhat from the usual image. The beam of light is not a straight line that slants upwards, but is slightly convex.

4. Adjust the headlight so that the intersection of the convex and horizontal light beam coincides with the intersection of the asymmetric diagonal and horizontal adjustment line. It does not make any difference if the convex beam is above the asymmetric diagonal.


K1 01 473

4. REMOVAL AND INSTALLATION

4.1 REMOVAL AND INSTALLATION, WINDSCREEN WIPER SYSTEM

When replacing the wiper linkage, the following points must be observed.

If the balls of the wiper linkage are worn, replace them as well as the wipers.

Use the proper tools when removing the old wipers to avoid damaging the seals.

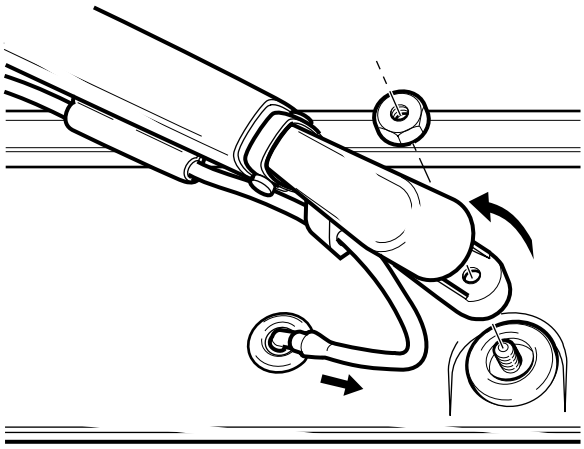
When installing new wipers, use the specified grease. See "Technical data".

When fitting new wipers, never hit the sealing covers on the wipers with a hammer or other hard object. The covers are only 1 mm thick and might be damaged.

If the motor spindle shows axial play, replace the motor. This play will cause excessive wear to the wiper linkage.

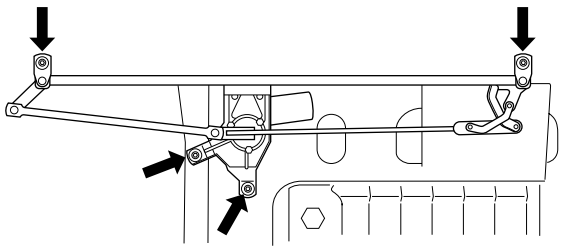
Removing windscreen wiper system

1. Open the windscreen wiper arm covers.
2. Remove the attachment nuts of the windscreen wiper arms.
3. Remove the windscreen washer fluid hoses and remove the windscreen wiper arms.



K1 00 654

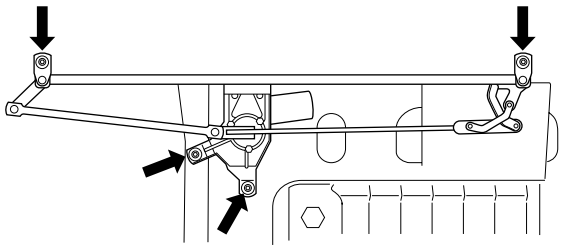
4. Remove the cab grille.
5. Remove the corner pieces.
6. Remove the windscreen wiper panel.
7. Unplug the connector of the windscreen wiper system.
8. Remove the attachment bolts from the windscreen wiper system and remove the entire system.



K1 01 038

Installing windscreen wiper system

1. Install the complete windscreen wiper system and secure it using the attachment bolts.
2. Attach the connector of the windscreen wiper motor.
3. Position the windscreen wiper panel.
4. Fit the corner pieces.
5. Fit the cab grille.
6. Put the windscreen wiper motor in the neutral position by turning it on and off quickly using the switch in the cab.
7. Fit the windscreen wiper arms.
8. Tighten the attachment nuts of the windscreen wiper arms to the specified torque, see "Technical data".
9. Fit the windscreen washer fluid hoses.
10. Close the covers.



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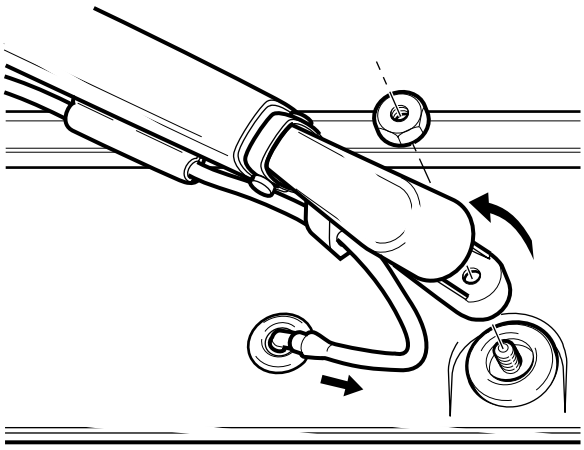
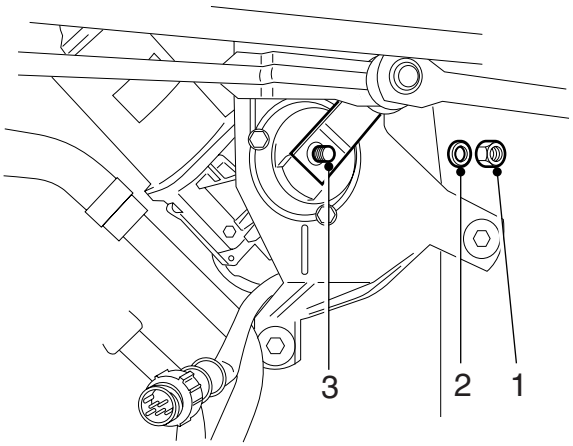


K1 00 654

4.2 REMOVAL AND INSTALLATION, WINDSCREEN WIPER MOTOR

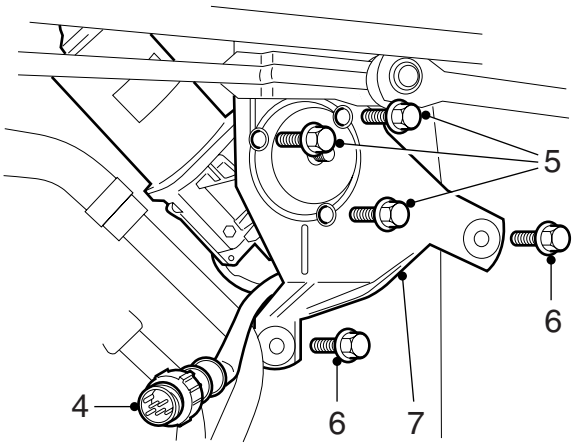
Removing windscreen wiper motor

1. Open the cab grille.
2. Turn the windscreen wiper motor crank. Remove the nut (1) and circlip (2).
3. Disconnect the rod linkage from the spindle of the windscreen wiper motor (3).



K1 01 652

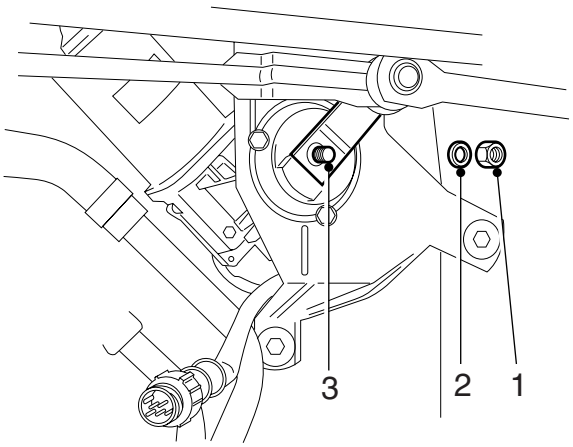
4. Unplug the windscreen wiper motor connector (4).
5. Remove the windscreen wiper motor attachment bolts (5).
6. Remove the attachment bolts (6) from the windscreen wiper motor bracket.
7. Bend the bracket (7) forward and remove the windscreen wiper motor.



K1 01 653

Installing windscreen wiper motor

1. Install the windscreen wiper motor and attach it to the bracket (7) using attachment bolts (5).
2. Connect the windscreen wiper motor connector (4).
3. Bend the bracket (7) back.
4. Put the bracket (7) against the cab body and fit the attachment bolts (6). Tighten the attachment bolts (6) to the specified tightening torque, see "Technical data".
5. Put the windscreen wiper motor in the neutral position by turning it on and off quickly using the switch in the cab.



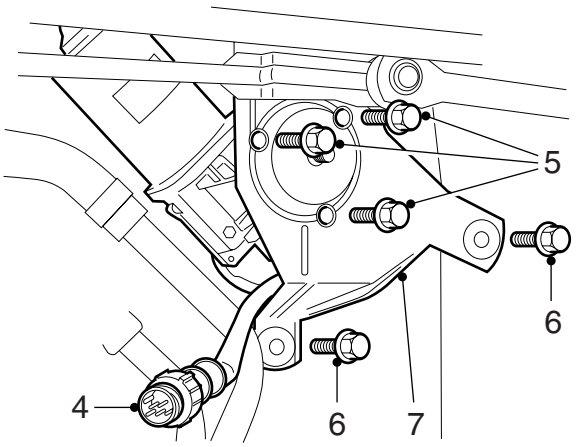
K1 01 652

6. Fit the rod linkage with circlip (2) and nut (1) to the spindle of the windscreen wiper motor (3). Hand-tighten the nut.

7. Set the rod linkage in the neutral position, the windscreen wipers in the horizontal position and tighten the nut (1). Tighten the nut (1) to the specified tightening torque. See "Technical data".

8. Switch on the windscreen wiper motor and check the operation of the windscreen wiper mechanism and the position of the wiper arms.

9. Close the cab grille.



K1 01 653

4.3 REMOVAL AND INSTALLATION, STEPWELL AND ENTRANCE STEP SUPPORT

Removing stepwell and entrance step support

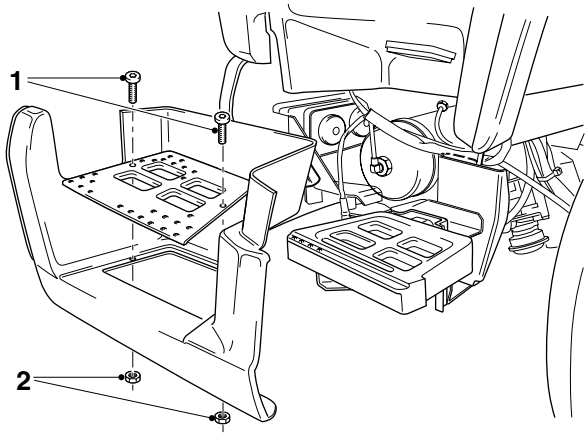
1. Remove the attachment bolts (1) and nuts (2) from the non-slip plate and plastic cladding and remove them.

2. Remove the attachment bolts from the entrance step support and remove it.

Installing stepwell and entrance step support

1. Fit the entrance step support.

2. Fit the plastic cladding and the non-slip plate, using the attachment bolts and nuts.



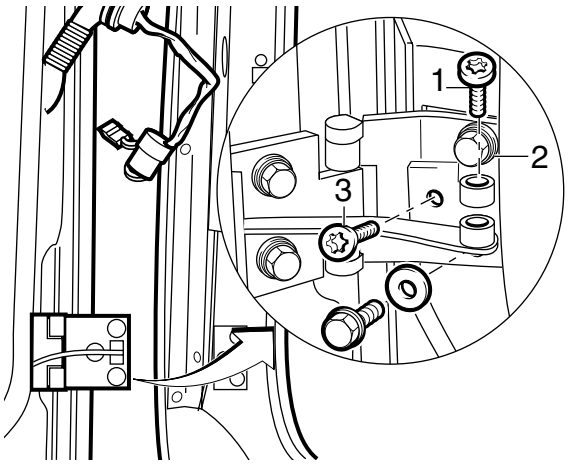
K1 00 932

4.4 REMOVAL AND INSTALLATION, DOORS

Removing doors

1. Disconnect the connectors in the door.
2. Remove the grommet in the A-pillar.
3. Remove the torx bolt (1). Loosen the door check. Remove the hinge bolt (2).
4. Suspend the door in slings.

   Note:
   Protect the door paint by taping the places where the slings will contact the door.
5. Remove all other hinge bolts and take off the door.



K1 00 666

Installing doors

1. Suspend the door in the slings and position it with the hinges in front of the attachment holes.

   Note:
   Protect the door paint by taping the places where the slings will contact the door.
2. Centre the attachment plate in the A-pillar and fit all hinge bolts with the exception of hinge bolt (2).
3. Fit the door check and then hinge bolt (2).
4. Feed the connectors through the A-pillar and fit the grommet.
5. Connect the connectors in the door and fit the cover.
6. Close the door carefully and adjust it; see chapter "Inspection and adjustment"

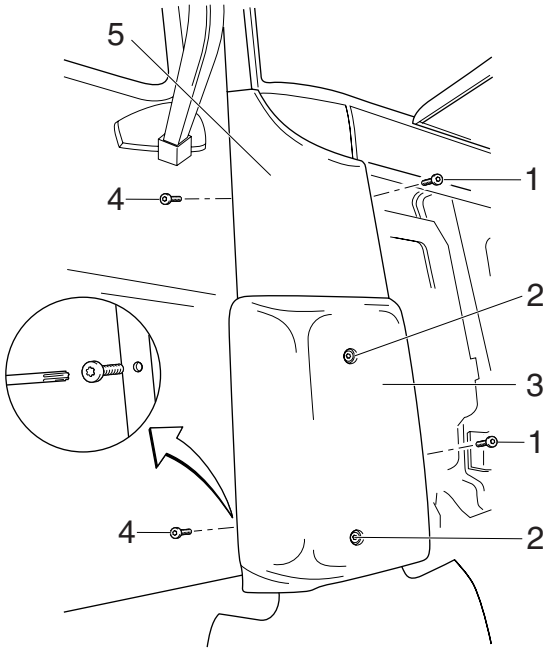
4.5 REMOVAL AND INSTALLATION, CORNER PIECE

Removing corner piece

1. Open the grille and remove the attachment bolts (1).
2. Open the door and remove the attachment bolts (4) in the door strut.
3. Remove the corner piece (5).

Installing corner piece

1. Place the corner piece (5) and fix it in place in the door strut and at the front of the cab (1) with the attachment bolts (4).
2. Close the grille and the door.

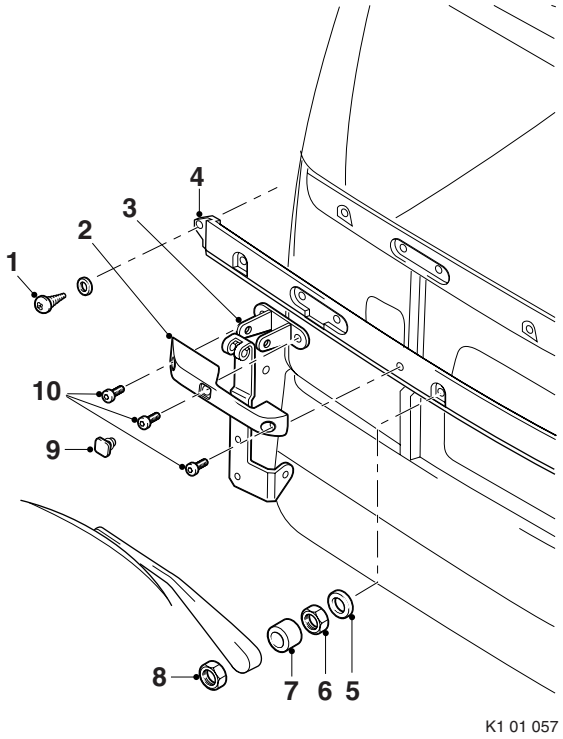


K1 00 926

4.6 REMOVAL AND INSTALLATION, WINDSCREEN WIPER PANEL

Removing windscreen wiper panel

1. Remove the corner pieces.
2. Remove the attachment bolts (1) from the ends of the windscreen wiper panel.
3. Remove the nuts (8) from the windscreen wiper arms and remove the arms.
4. Remove the covers (7).
5. Remove the nuts (6) and washers (5).
6. Remove the covers (9).
7. Remove the attachment bolts (10) and remove the handles (2).
8. Remove the cab grille with the supports (3).
9. Remove the windscreen wiper panel (4).



K1 01 057

Installing windscreen wiper panel

1. Install the windscreen wiper panel (4).
2. Fit the cab grille with the supports (3).
3. Fit the handles (2) and secure them with the attachment bolts (10).
4. Fit the covers (9).
5. Fit the washer (5) and the nut (6).
6. Fit the covers (7).
7. Put the windscreen wiper arms in place and secure them using the nuts (8).
8. Fit the attachment bolts (1) to the ends of the windscreen wiper panel.
9. Fit the corner pieces.

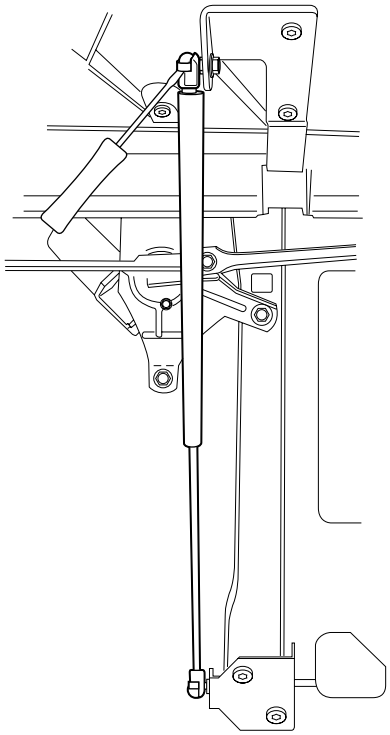
4.7 REMOVAL AND INSTALLATION, CAB GRILLE

Removing cab grille

1. Open the grille and support it.
2. Remove the retaining clips from the gas damper mounting using a screwdriver and remove the gas dampers.
3. Remove the handles.
4. Remove the dowels using a punch and remove the cab grille.

Installing cab grille

1. Put the cab grille in place and fit the dowels using a punch.
2. Support the grille in the open position and install the gas dampers with the retaining clips.
3. Attach the handles.

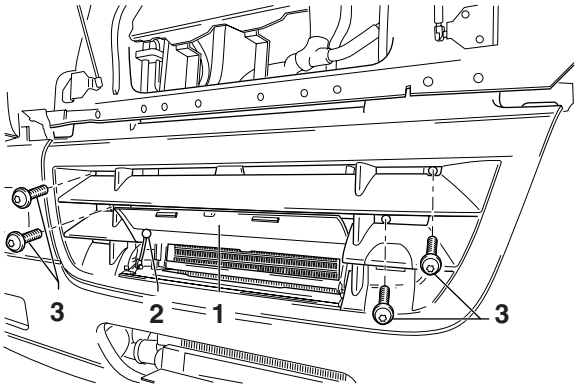


K1 01 034

4.8 REMOVAL AND INSTALLATION, VEHICLE GRILLE

Removing vehicle grille

1. Remove the corner pieces around the headlights.
2. Remove the attachment bolts (3) from the front of the grille.
3. Open the cover (1) at the front and remove the rubber tie rods (2).
4. Remove the grille by lifting it out of the notches at the bottom.



K1 01 097

Installing vehicle grille

1. Put the top of the grille under the cross member.
2. Lift the lower edge of the grille and hook into the notches.
3. Insert the attachment bolts (3).
4. Fit the rubber tie rods (2) and close the cover (2).
5. Fit the corner pieces around the headlights.

4

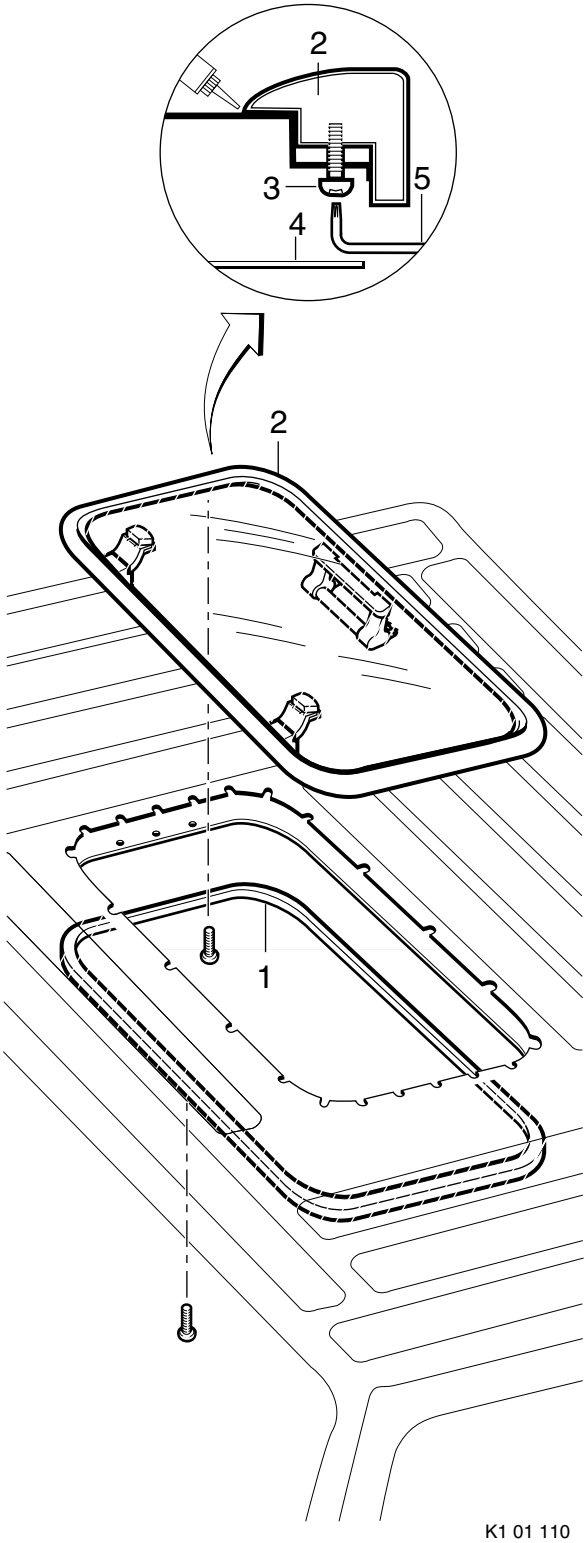
4.9 REMOVAL AND INSTALLATION, ROOF HATCH ASSEMBLY

Removing roof hatch assembly

1. Remove the roof console.
2. Disconnect the interior lighting connector and remove the roof hatch trim.
3. Remove the headlining.
4. Remove the attachment bolts from around the roof hatch.
5. Remove the roof hatch complete with the glass. If there is an electric roof hatch, remove the connector of the adjusting motor.

Installing roof hatch assembly

1. Install the roof hatch.
2. Attach the roof hatch all around with the attachment bolts.
3. Connect the lighting.
4. Fit the headlining, roof hatch trim and the roof console.

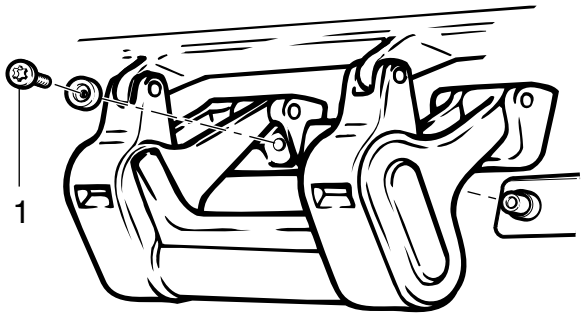


K1 01 110

4.10 REMOVAL AND INSTALLATION, ROOF HATCH GLASS

Removing roof hatch glass

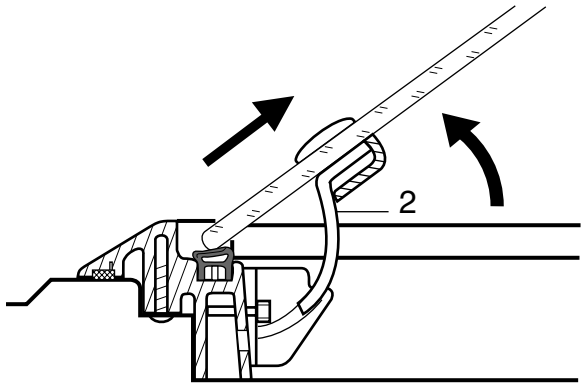
1. Open the roof hatch.
2. Remove the attachment bolts (1) in the handle and remove the roof hatch glass from the guides.
3. Lift the glass at the rear end of the hatch until the metal lugs (2) at the front end are fully released from the hinges and move the glass backwards to remove it.



K1 00 671

Installing roof hatch glass

1. Position the metal lugs (2) in the hinges and move the glass downwards.
2. Fit the handle to the glass with the attachment bolts.
3. Close the hatch.



K1 00 672

4

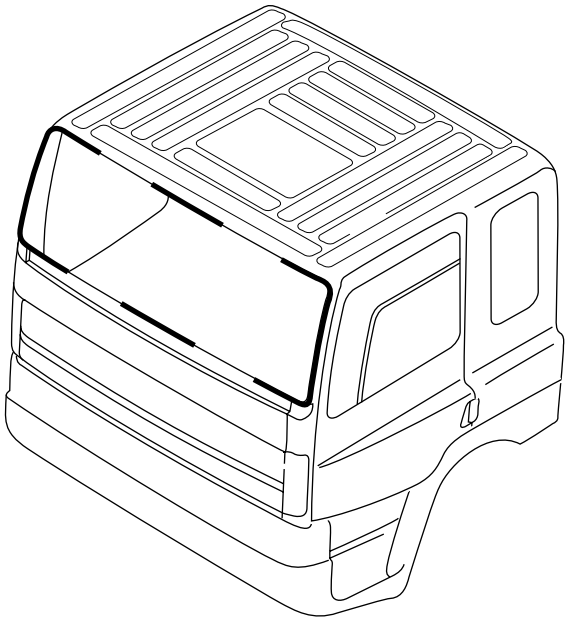
4.11 REMOVAL AND INSTALLATION, WINDSCREEN

Removing windscreen

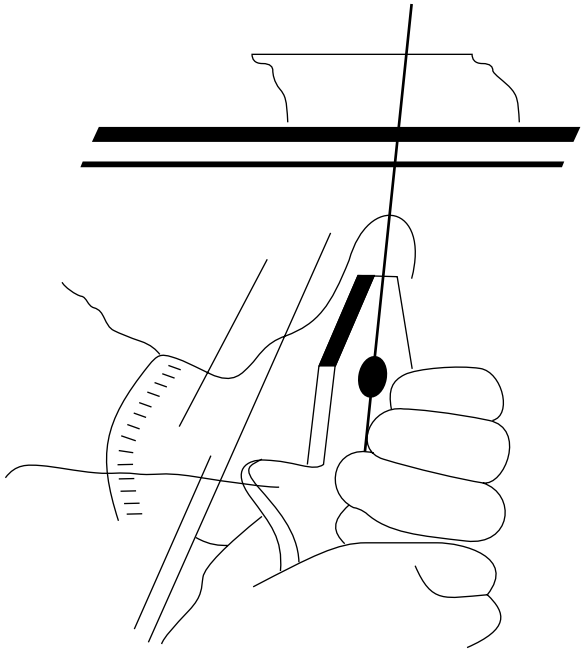
1. Remove the windscreen wiper arms.
2. Remove the rubber edging from the windscreen.
3. Remove the stepwell handles on the window side.
4. Remove the plastic cover strips on the inside of the windscreen pillars (A-pillar).
5. Protect the curved areas on the outside of the windscreen frame with linen tape. Also use tape to protect the plastic parts on the inside and the defroster openings of the heating and ventilation system.

   Note:
   Take care not to damage the paint.
6. Put the wire, special tool (DAF no. 1329415), approximately in the middle of the top edge and in the middle of the bottom edge of the window frame using pliers or a special pull-through needle, special tool (DAF no. 1240458), through the sealant.

   Note:
   Remove the wire pull-through needle before fitting the wire ends to the handles of the cutting wire set.
7. The length of the cutting wire should be 1.5 times the height of the windscreen.
8. Then attach the accessory handles, special tool (DAF no. 0499817), to the cutting wire.

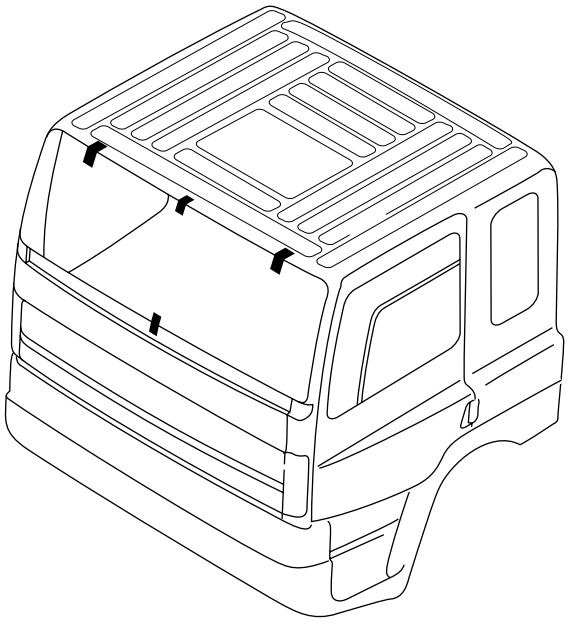


K1 00 714



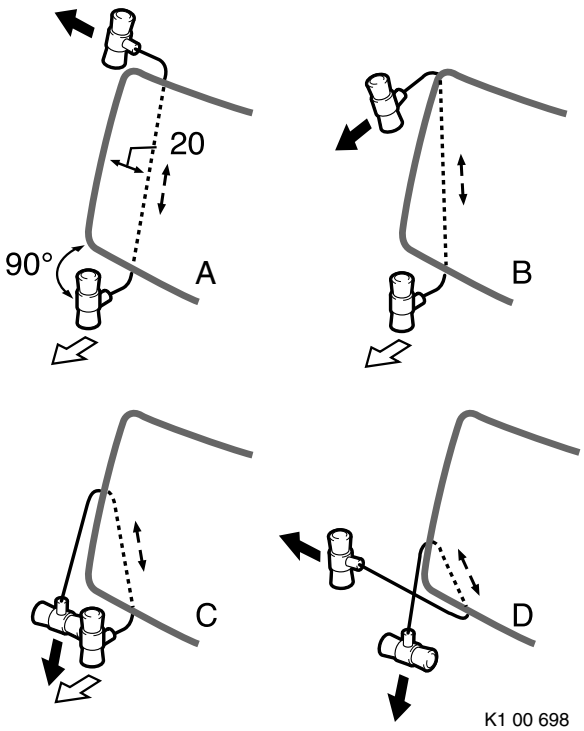
K1 00 715

9. Use tape strips to protect the glass from falling out accidentally (after the sealant has been cut through).



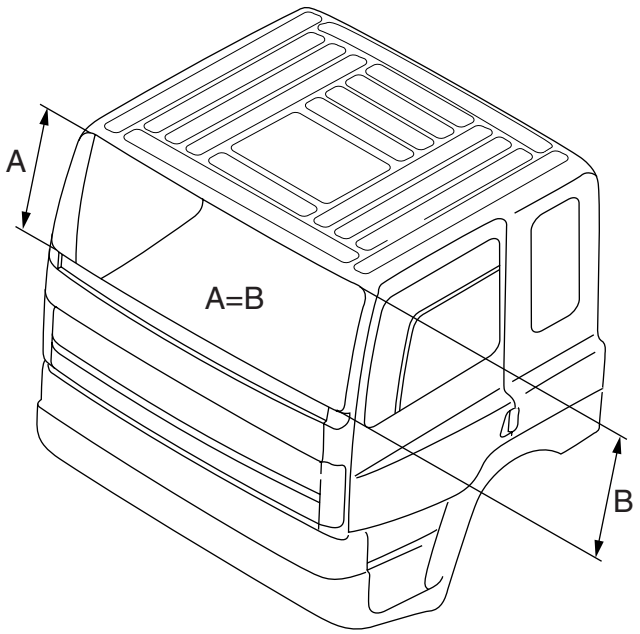
K1 00 716

10. Start cutting in the middle. Make sure the wire is kept moving and tightly stretched all the time. If the wire gets twisted, it will inevitably break.
11. Keep the cutting wire as close as possible to the edge of the glass.
12. Make sure the wire ends are crossed before the bottom corners are reached.
13. Remove the windscreen using the two rubber suction pads, special tool (DAF no. 0484800), from the window frame.
14. Remove any remaining sealant in the window frame with a scraper, special tool (DAF no. 1329417). Make sure the remaining layer of sealant has a thickness of at most 1 - 1.5 mm and that it is flat and smooth.
15. Remove the dashboard panel at the top.
16. Remove frayed pieces and granules of old sealant and clean the frame thoroughly.



K1 00 698

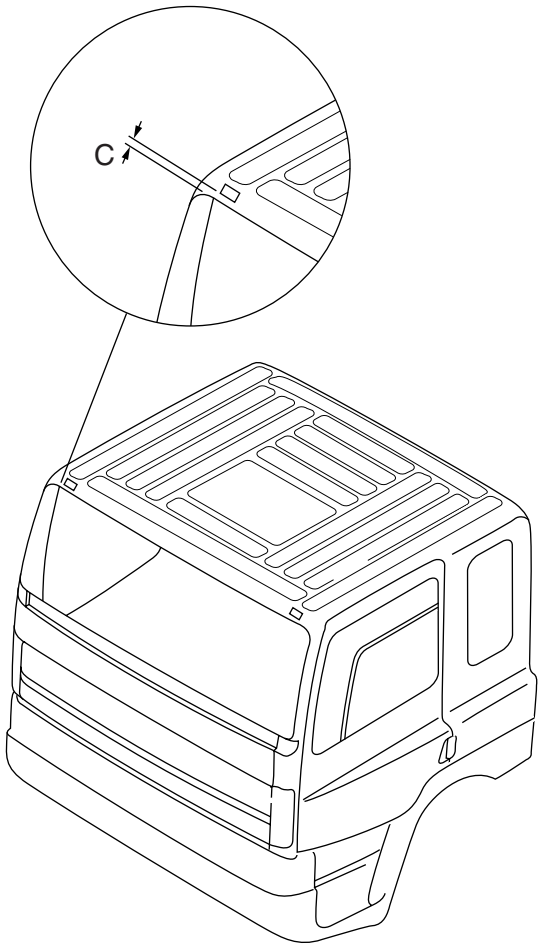
17. Check that the upper and lower edges of the windscreen frame in the cab body are parallel.



K1 00 717

Important tips

- If the new glass is fitted at a later time, the old, fully cured sealant should be cleaned with the specified activator 15 minutes before the glass is fitted, to ensure proper adhesion, see "Technical data".
- Immediately remove any spilt activator or splashes from painted areas using paper towels or tissues.
- Any damage to the paint on the window frame should be repaired immediately with the right type of paint, well before the new windscreen is fitted.
- Always work in a clean area.
- Tolerance (c) between the rubber windscreen trim and the bottom of the marker lights must be 2 mm.
- Wear industrial gloves or use a special hand cream.
- Preferably use paper towels or tissues instead of cleaning rags.

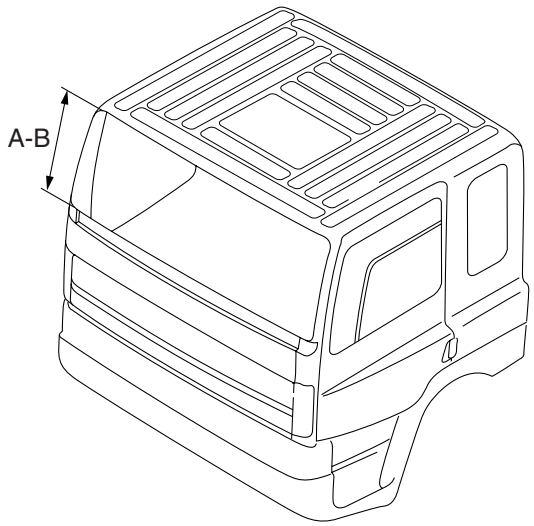


K1 00 718

Installing windscreen

Be careful when using an activator: the fluid will cause skin irritation and swallowing will cause burning. Inhaling may cause breathing problems.

1. Check that the windscreen frame (A - B) is parallel.
2. Make sure that the guide rail is smooth and flat (no major irregularities).
3. Check the windscreen for damage.
4. Attach two double suction pads, special tool (DAF no. 0484800), to the outside of the windscreen.
5. Put the glass with the suction pads on a completely clean workbench.
6. Fit the rubber trimming to the glass and secure it with tape on the outside of the glass.
7. Place the glass in the frame without using sealant, starting at the bottom and ensuring that it fits exactly in the frame.



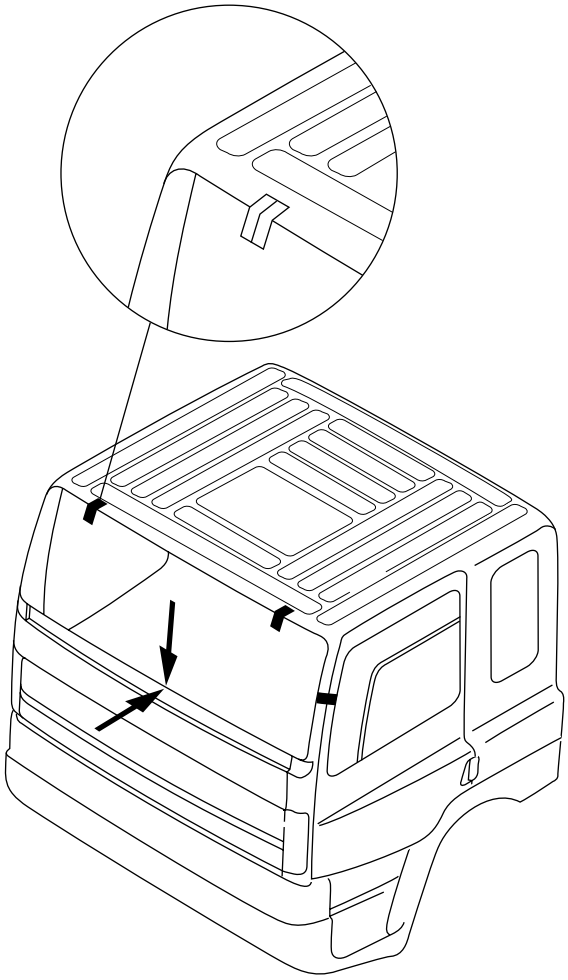
K1 00 719

8. Mark the correct position of the glass in the frame with strips of tape. Cut through the tape in the frame.

9. Remove the glass from the frame and place the glass on the workbench.

10. Clean the glass edge where the sealant is to be applied using the specified activator, see "Technical data". Apply the activator using a well moistened ball of crumpled paper towels or tissue; swipe it off immediately using a ball of crumpled paper towels or tissues so that only a thin layer remains. Allow the surface to dry for at least the specified time, see "Technical data".

11. Clean the cut-back sealant in the frame using the specified activator, see "Technical data". Apply the activator using a well moistened ball of crumpled paper towels or tissue; swipe it off immediately using a ball of crumpled paper towels of tissues so that only a thin layer remains. Allow the surface to dry for at least the specified time, see "Technical data".

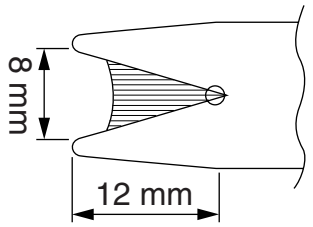


K1 00 720

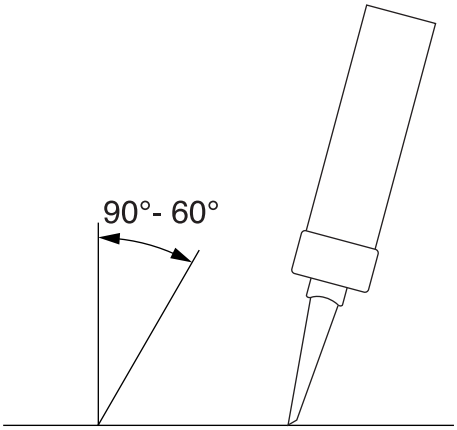
Applying sealant

1. For hot working the sealant must be preheated in an oven, special tool (DAF no. 1329416), for 60 minutes at 80°C.
2. Give the spraying nozzle the shape shown in the drawing.
3. Take note of the processing time when applying the sealant, see "Technical data".
4. Fit the spraying nozzle to the cartridge and apply the sealant to the windscreen, spraying as evenly as possible.
5. Place the sealant gun with the opening 90°/ 60° onto the glass and move it evenly to build up a good layer.
6. Avoid air bubbles in the layer of sealant.

Note:
If a pneumatic glue gun is used for sealing, special tool (DAF no. 1240444), then before beginning adjust the pressure in the gun (by spraying several test strips).



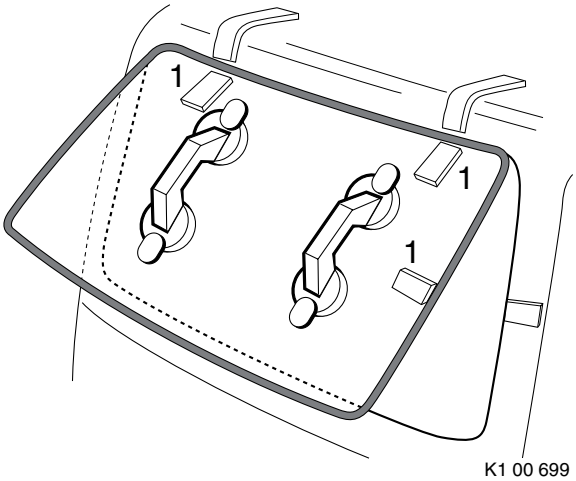
K1 00 721



K1 00 722

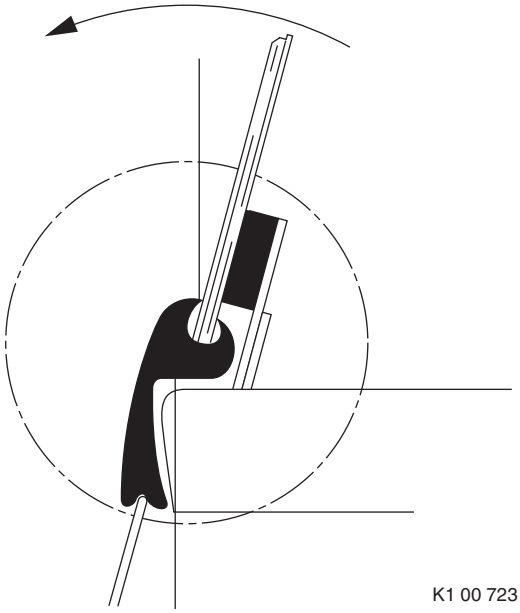
Fitting the glass

1. The glass should be taken from the workbench by two persons and it should be placed in the frame in one go. Use the dimensions on the tape strips (1).



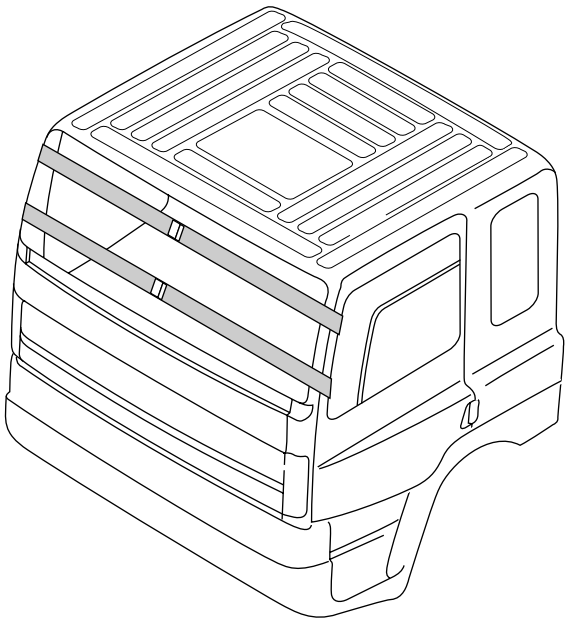
K1 00 699

2. Make sure that the rubber windscreen trim at the bottom catches properly into the upper grille plate.
3. Use the specified sealant remover to remove the excess sealant immediately from the painted parts, see "Technical data".
4. For safety, open the windows to avoid undesirable pressure build-up on the windscreen.



K1 00 723

5. Depending on the type of sealant used (setting time), fit straps. See "Technical data". Protect the paint by fitting linen tape in the places where the straps touch it.
6. If applicable, pull two strips round the outside of the windscreen and the cab pillar. Put strips of wood or Tempex underneath to avoid damage.
7. Let the sealant cure for the specified time. See "Technical data".
8. Remove all tape used for protection and marking from the cab body.
9. Then clean the entire windscreen and the parts of the cab body which have been fouled during the installation of the windscreen using a (window) cleaning agent.
10. Fit the A-pillar trimming panels in the cab.
11. Install the dashboard panel at the top.
12. Fit the stepwell handles.
13. Fit the windscreen wipers and adjust them.



K1 00 724

4.12 REMOVAL AND INSTALLATION, SLEEPER CAB SIDE WINDOW/REAR WINDOW

Note:
The removal procedure for the rear window is identical to that of the side window. Therefore, only removal and installation of the side window is described here.

Removing sleeper cab side window

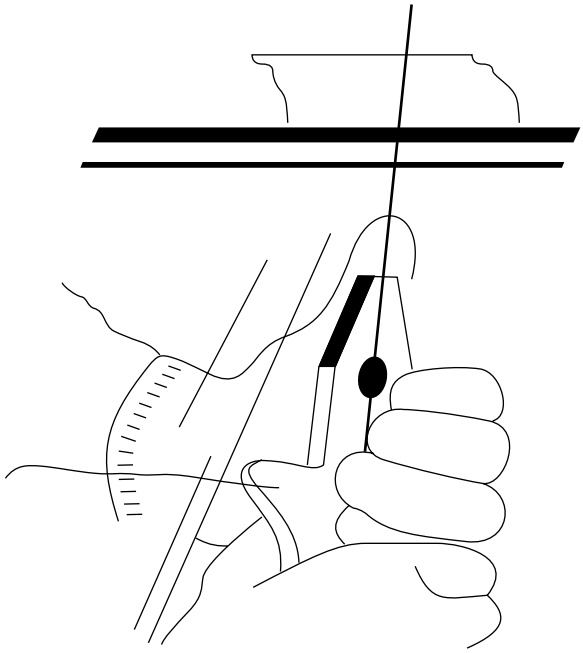
Note:
Take care not to damage the paint.

1. Put the wire, special tool (DAF no. 1329415), approximately in the middle of the top edge and in the middle of the bottom edge of the window frame using pliers or a special pull-through needle, special tool (DAF no. 1240458), through the sealant.

   Note:
   Remove the wire pull-through needle before fitting the wire ends to the handles of the cutting wire set.

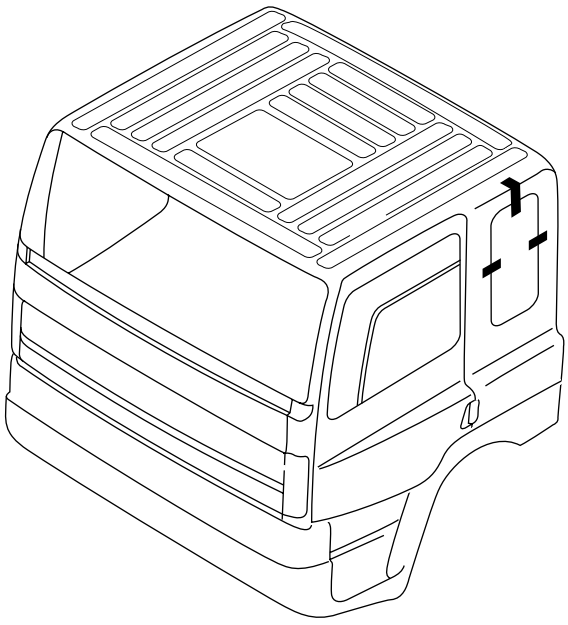
2. The length of the cutting wire should be 1.5 times the height of the window.

3. Then attach the accessory handles, special tool (DAF no. 0499817), to the cutting wire.



K1 00 715

4. Use tape strips to protect the glass from falling out accidentally (after the sealant has been cut through).



K1 01 362

5. Start cutting in the middle. Make sure the wire is kept moving and tightly stretched all the time. If the wire gets twisted, it will inevitably break.

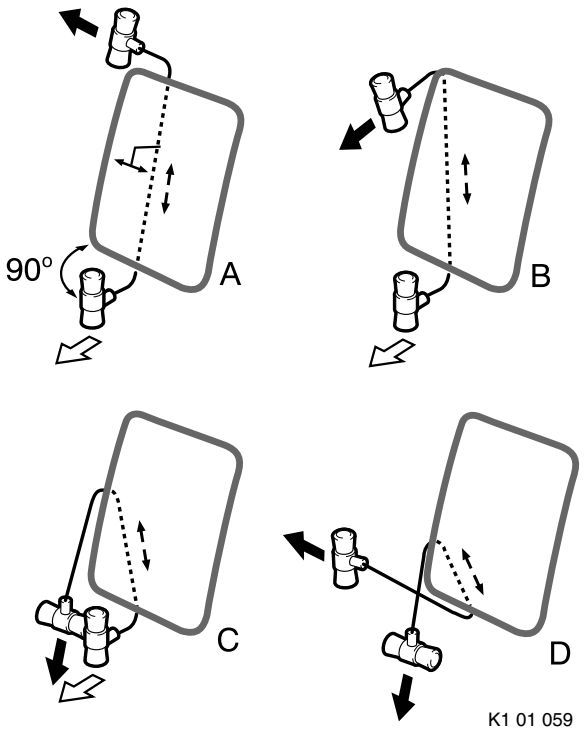
6. Keep the cutting wire as close as possible to the edge of the glass.

7. Make sure the wire ends are crossed before the bottom corners are reached.

8. Remove the glass using a suction pad, special tool (DAF no. 0484800), from the window frame.

9. Remove any remaining sealant in the window frame with a scraper, special tool (DAF no. 1329417). Make sure the remaining layer of sealant has a thickness of at most 1 - 1.5 mm and that it is flat and smooth.

10. Remove frayed pieces and granules of old sealant and clean the frame thoroughly.



Important tips
- If the new glass is fitted at a later time, the old, fully cured sealant should be cleaned with the specified activator 15 minutes before the glass is fitted, to ensure proper adhesion, see "Technical data".
- Immediately remove any spilt activator or splashes from painted areas using paper towels or tissues.
- Any damage to the paint on the window frame should be repaired immediately with the right type of paint, well before the new glass is fitted.
- Always work in a clean area.
- Wear industrial gloves or use a special hand cream.
- Preferably use paper towels or tissues instead of cleaning rags.

Installing sleeper cab side window
1. Make sure that the guide rail is smooth and flat (no major irregularities).

2. Check the side window for damage.

3. Attach a rubber suction pad, special tool (DAF no. 0484800), to the outside of the window.

4. Put the glass with the suction pads on a completely clean workbench.

5. Fit the rubber trimming to the glass and secure it with tape on the outside of the glass.

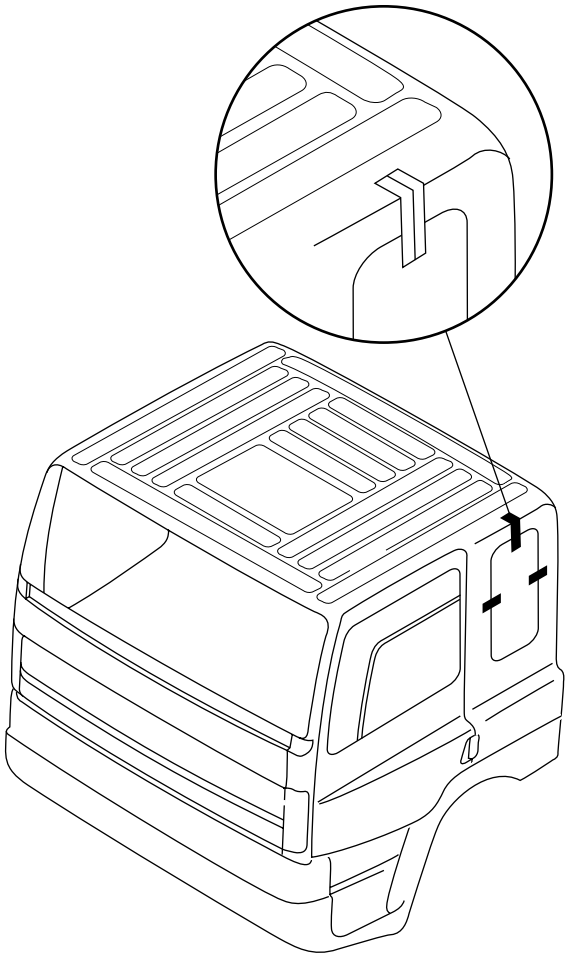
6. Place the glass in the frame without using sealant, starting at the bottom and ensuring that it fits exactly in the frame.

7. Mark the correct position of the glass in the frame with strips of tape. Cut through the tape in the frame.

8. Remove the window from the frame and place the window on the workbench.

9. Clean the glass edge where the sealant is to be applied using the specified activator, see "Technical data". Apply the activator using a well moistened ball of crumpled paper towels or tissue; swipe it off immediately using a ball of crumpled paper towels of tissues so that only a thin layer remains. Allow the surface to dry for at least the specified time, see "Technical data".

10. Clean the cut-back sealant in the frame using the specified activator, see "Technical data". Apply the activator using a well moistened ball of crumpled paper towels or tissue; swipe it off immediately using a ball of crumpled paper towels or tissues so that only a thin layer remains. Allow the surface to dry for at least the specified time, see "Technical data".

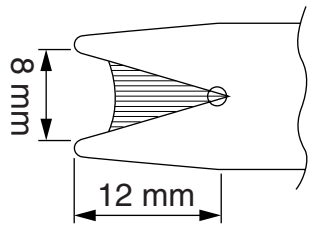


K1 01 347

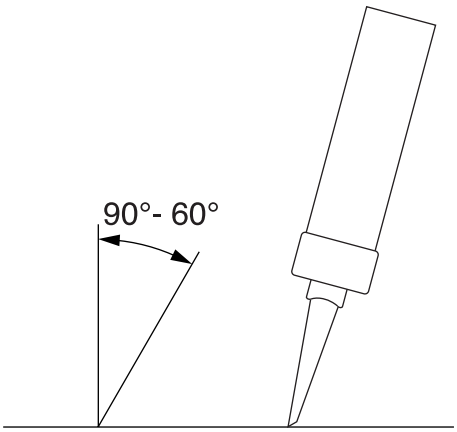
Applying sealant

1. For hot working the sealant must be preheated in an oven, special tool (DAF no. 1329416), for 60 minutes at 80°C.
2. Give the spraying nozzle the shape shown in the drawing.
3. Take note of the processing time when applying the sealant, see "Technical data".
4. Fit the spraying nozzle to the cartridge and apply the sealant to the glass, spraying as evenly as possible.
5. Place the sealant gun with the opening 90°/ 60° onto the glass and move it evenly to build up a good layer.
6. Avoid air bubbles in the layer of sealant.

Note:
If a pneumatic glue gun is used for sealing, special tool (DAF no. 1240444), then before beginning adjust the pressure in the gun (by spraying several test strips).



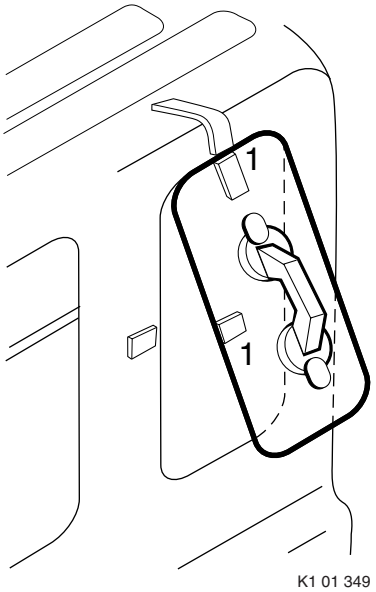
K1 00 721



K1 00 722

Fitting the glass

1. Pick up the glass and place it in the frame in one go. Use the tape strips (1) for dimensions.
2. Use the specified sealant remover to remove the excess sealant immediately from the painted parts, see "Technical data".
3. For safety, open the windows to avoid undesirable pressure build-up on the side window.



K1 01 349

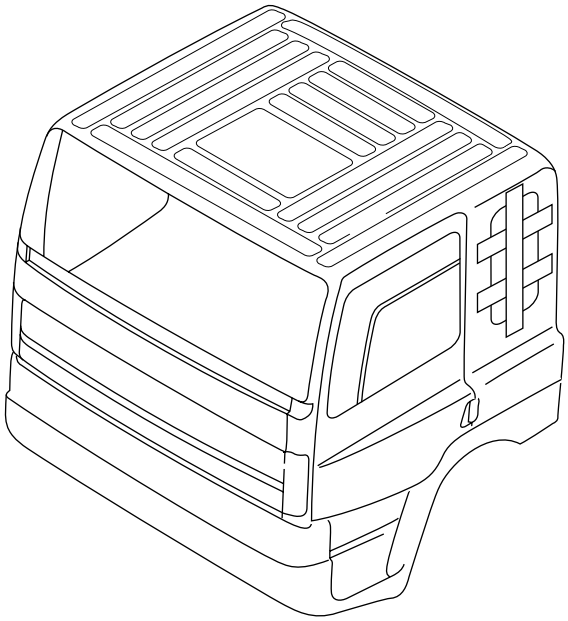
© 200346

4. To prevent the side window moving, tape it to the cab with wide tape until the sealant has cured.

5. Let the sealant cure for the specified time. See "Technical data".

6. Remove all tape used for protection and marking.

7. Then clean the entire window and the parts of the cab body which have been fouled during the installation of the window using a (window) cleaning agent.

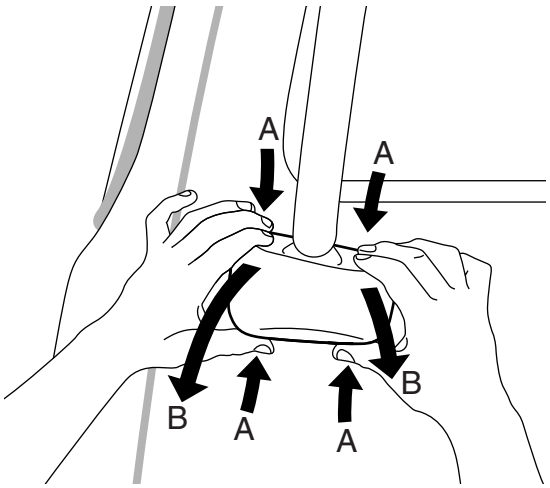


K1 01 348

4.13 REMOVAL AND INSTALLATION, EXTERIOR MIRRORS COMPLETE WITH ARMS

Removing main/wide-angle/dead angle exterior mirrors complete with arms

1. Remove the lower cover by pressing the top and bottom sides (A) firmly. Tilt the cover backwards (B), away from the D-shaped support.
2. Remove the connectors to the mirror heater and to the adjustment on the inside of the door.
3. Remove the attachment bolts and remove the entire mirror complete with arm.



K1 01 226

Installing main/wide-angle/dead angle exterior mirrors complete with arms

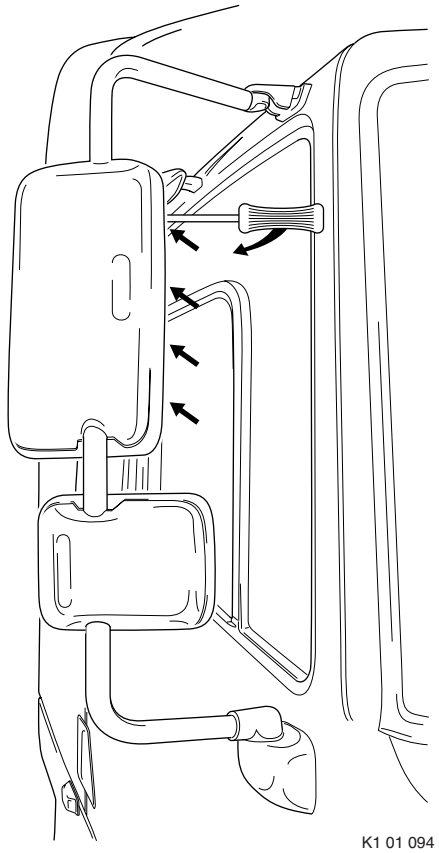
1. Install the mirror complete with arm and secure it using the attachment bolts.
2. Fit the connectors to the inside of the door.
3. Fit the cover and press it firmly.

4.14 REMOVAL AND INSTALLATION, EXTERIOR MIRRORS

Removing main exterior mirror

1. Remove the cover at the back of the exterior mirror. This cover can be loosened by sticking a wide screwdriver into the openings (do not turn it) and moving the screwdriver backwards.

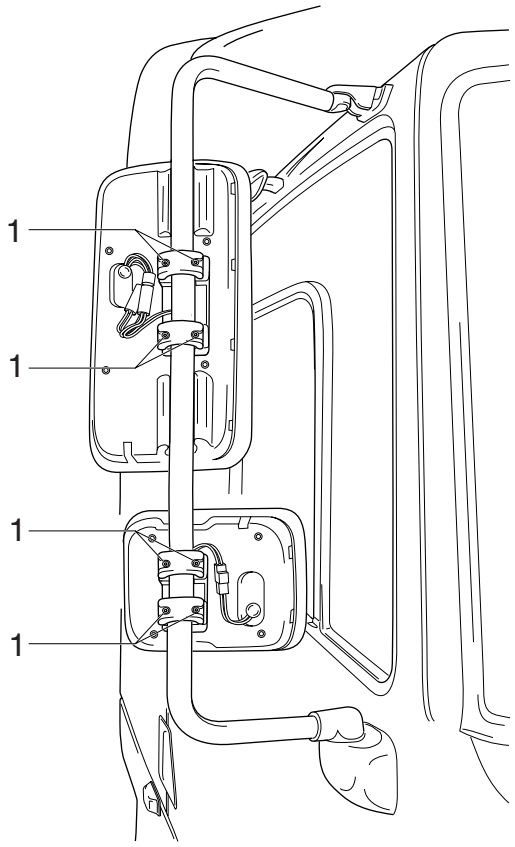
2. Unplug the connectors of the exterior mirror heating and/or exterior mirror adjustment.


K1 01 094

3. Remove the clamping bracket bolts (1) and remove the exterior mirror from the D-shaped arm.

Installing main exterior mirror

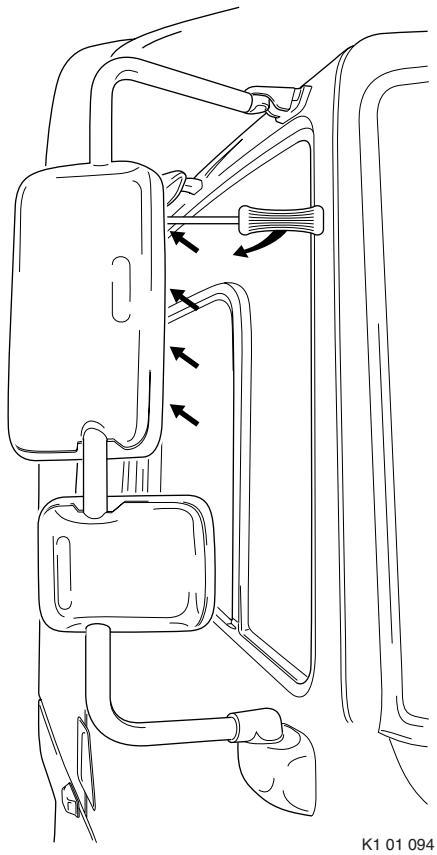
1. Fit the exterior mirror to the D-shaped arm. Hand-tighten the clamping bracket bolts (1).
2. Fit the connectors of the exterior mirror heating and/or exterior mirror adjustment.
3. Position the mirror at the proper height and angle, see "Technical data".
4. Tighten the clamping bracket bolts.
5. Fit the cover (push into place).



K1 01 095

Removing wide-angle exterior mirror/dead angle exterior mirror

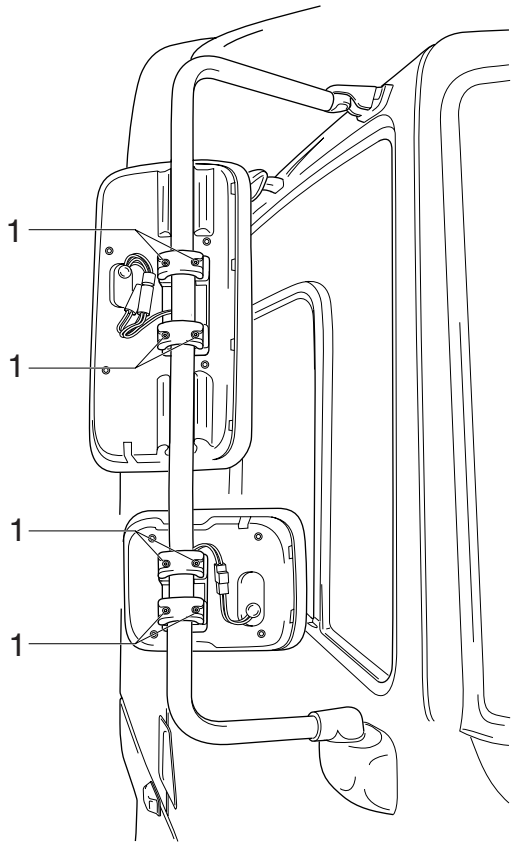
1. Remove the cover at the back of the exterior mirror. This cover can be loosened by sticking a wide screwdriver into the openings (do not turn it) and moving the screwdriver backwards.
2. Unplug the connectors of the exterior mirror heating.


K1 01 094

3. Remove the clamping bracket bolts (1) and remove the exterior mirror from the D-shaped arm.

Installing wide-angle exterior mirror/dead angle exterior mirror

1. Fit the exterior mirror to the D-shaped arm. Hand-tighten the clamping bracket bolts (1).
2. Fit the connectors of the exterior mirror heating.
3. Position the mirror at the proper height and angle, see "Technical data".
4. Tighten the clamping bracket bolts.
5. Fit the cover (push into place).



K1 01 095

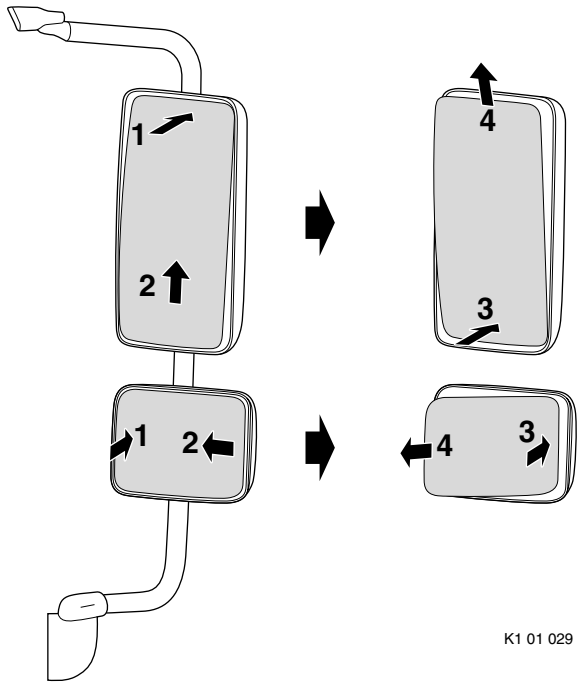
4.15 REMOVAL AND INSTALLATION, MIRROR GLASS

Removing main exterior mirror glass
1. Press in the mirror glass at the top (1).
2. Push the mirror glass upwards (2).
3. Press in the mirror glass at the bottom (3).
4. Put your fingers in the opening created and now push the mirror glass (from the bottom up) out of the fixing and remove the glass (4).

Installing main exterior mirror glass
1. Put the mirror glass in place.
2. Push the mirror glass from the top down into the fixing.
3. Put the mirror in its required position.

Removing wide-angle mirror glass/dead angle exterior mirror glass
1. Press the mirror glass in at the left side (1).
2. Push the glass sideways from right to left (2).
3. Press the mirror glass on the right-hand side (3).
4. Put your fingers in the opening created and now push the mirror from right to left out of the fixing and remove the glass (4).

Installing wide-angle mirror glass/dead angle exterior mirror glass
1. Put the mirror glass in place.
2. Push the mirror glass into the fixing from left to right.
3. Put the mirror in its required position.



K1 01 029

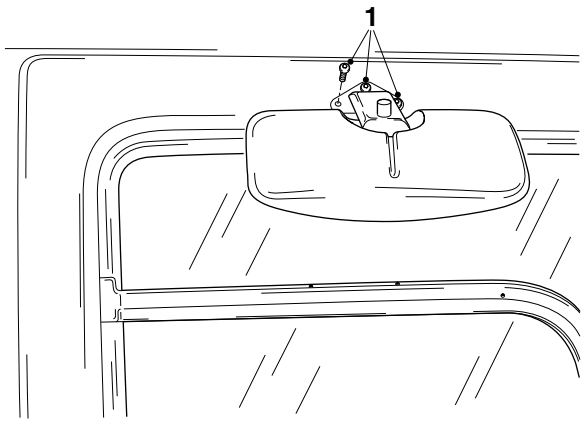
4.16 REMOVAL AND INSTALLATION, PAVEMENT MIRROR

Removing pavement mirror

1. Remove the attachment bolts (1) from the pavement mirror and remove the mirror.

Installing pavement mirror

1. Put the pavement mirror in place and secure it using the attachment bolts (1).

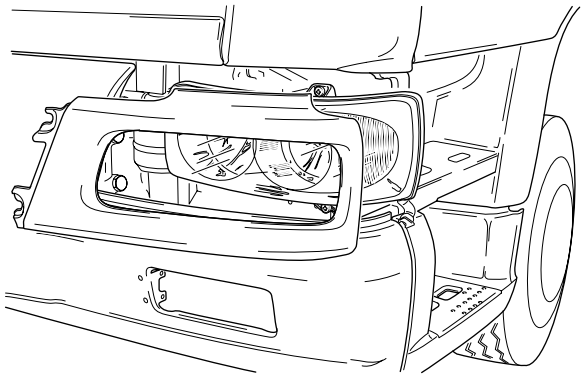


K1 01 064

4.17 REMOVAL AND INSTALLATION, HEADLIGHT

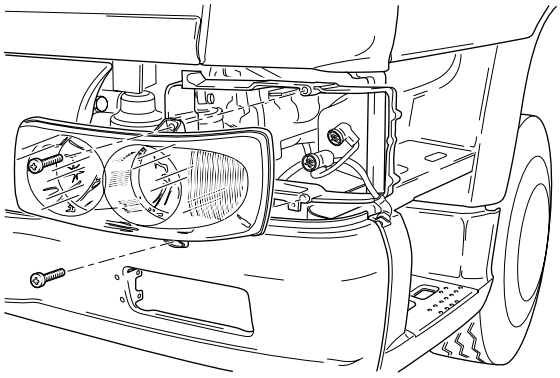
Removing headlight

1. Remove the attachment bolts in the stepwell and remove the plastic corner piece around the headlight.



K1 00 946

2. Remove the attachment bolts from the front of the headlight.
3. Pull the headlight forward and disconnect the connectors at the rear.
4. Remove the headlight.



K1 00 947

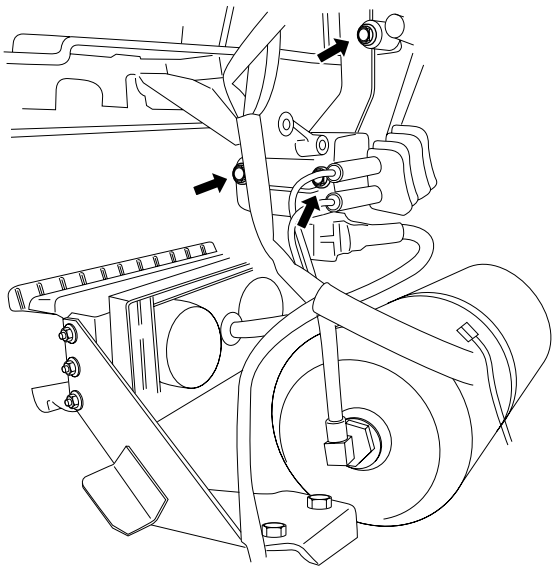
Installing headlight

1. Connect the headlight.
2. Hook the rubber protuberance in the recess and fix the headlight in place with the attachment bolts at the front.
3. Fit the plastic corner piece around the headlight and refit the corner piece in the stepwell.

4.18 REMOVAL AND INSTALLATION, HEADLIGHT BRACKET

Removing headlight bracket
1. Tilt the cab.
2. Remove the headlight.
3. Remove the attachment bolts from the headlight bracket and remove the bracket together with the height control valve.

Installing headlight bracket
1. Position the headlight bracket together with the height control valve and fix it with the attachment bolts.
2. Fit the headlight.
3. Tilt the cab back.

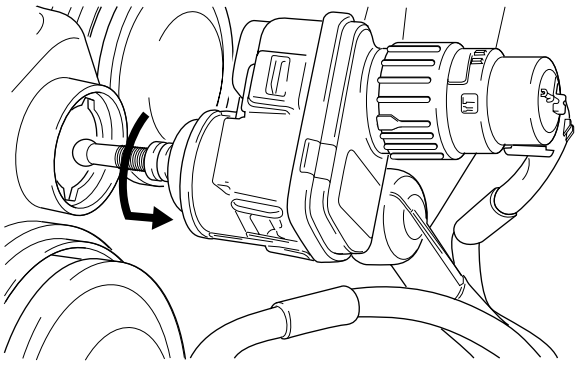


K1 01 031

4.19 REMOVAL AND INSTALLATION, HEADLIGHT LEVELLING CONTROL

Removing headlight levelling control
1. Tilt the cab forwards.
2. Disconnect the headlight levelling connector.
3. Remove the headlight levelling control by turning it fully counterclockwise out of the back of the headlight (at the rear).

Installing headlight levelling control
1. Fit the headlight levelling control by screwing it clockwise into the bayonet catch.
2. Fit the headlight levelling connector.
3. Tilt the cab back.



K1 01 100

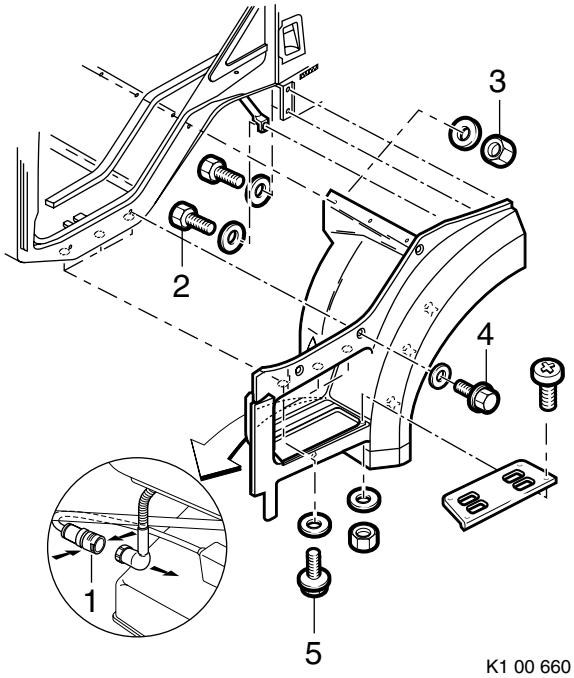
4.20 REMOVAL AND INSTALLATION, MUDGUARD ASSEMBLY

Removing mudguard assembly

1. Tilt the cab.
2. Disconnect the stepwell lighting connector (1).
3. Remove attachment bolts (2) and attachment nuts (3).
4. Support the mudguard, remove the attachment screws (4) and attachment bolts (5) and remove the mudguard assembly.

Installing mudguard assembly

1. Position the mudguard assembly and fit the attachment screws (4) and attachment bolts (5).
2. Fit the attachment bolts (2) and attachment nuts (3).
3. Connect the stepwell lighting connector (1).

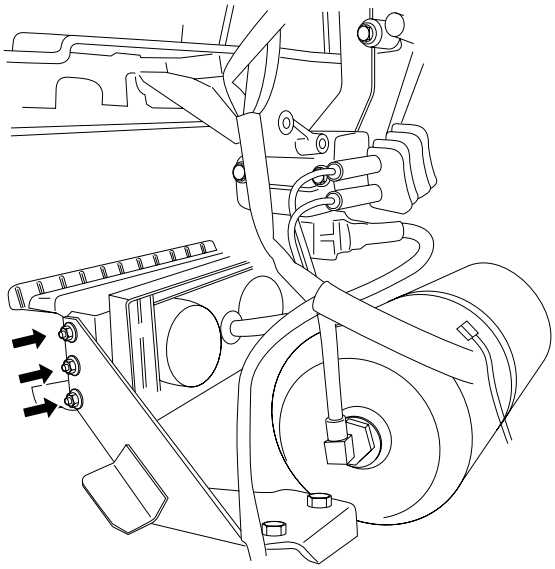


K1 00 660

4.21 REMOVAL AND INSTALLATION, BUMPER

Removing bumper

1. Remove the corner pieces around the headlights.
2. Remove the vehicle grille.
3. Remove the attachment bolts at the rear (bottom) of the bumper support on the chassis.
4. Remove the attachment bolts from the front of the bumper.
5. Disconnect the connectors and remove the bumper assembly.



K1 01 080

Installing bumper

1. Fit the connectors and the bumper.
2. Fit the attachment bolts at the front.
3. Fit the attachment bolts at the rear (bottom) of the bumper support.
4. Fit the vehicle grille.
5. Fit the corner pieces around the headlights.

4.22 REMOVAL AND INSTALLATION, SQUEEGEE STRIPS

Removing squeegee strips

1. Fully lower the door glass.

2. Remove the squeegee strips on the inside and outside of the door by pulling them from the window frame.

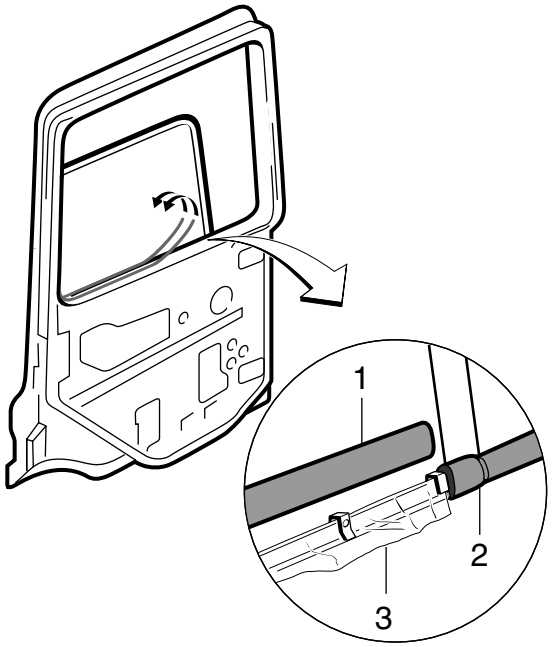
Installing squeegee strips

1. Fit the ends of the squeegee strips on the inside and outside in the top corner and fix these ends firmly in place.

2. Then work towards the bottom, while pressing firmly on the squeegee strip. Ensure that the squeegee strips (1) connect to the weatherstrip (2).

   Note:
   Make sure the foil (3) on the inside of the door is over the edge of the window frame when the squeegee strip is being fitted.

3. Fit the squeegee strips firmly by tapping them with a mallet.



K1 00 697

4.23 REMOVAL AND INSTALLATION, ANTI-WHISTLE WEATHERSTRIP

Removing anti-whistle weatherstrip

1. Remove the door and place it on a suitable work bench.

2. Remove the old anti-whistle weatherstrip and throw it away.

   Note:
   Avoid removing anti-whistle weatherstrips, if possible. Masking is preferred to removing! If removal of the anti-whistle weatherstrip is unavoidable, proceed as follows:

Installing anti-whistle weatherstrip

1. Clean the area to be glued (1) with the specified cleaning agent, see "Technical data".

2. Lightly roughen the area to be glued with the specified abrasive, see "Technical data".

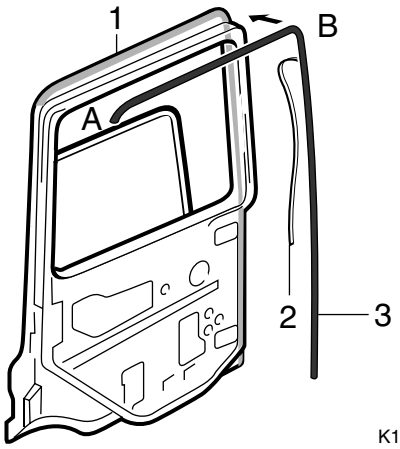
3. After roughening the area, remove any dust and grease as quickly as possible using the specified cleaning agent, see "Technical data".

   Note:
   For proper adhesion, the temperature should be at least 15°C. If necessary, this temperature can be obtained by using a blow drier.

4. Pull the protective foil (2) from the new anti-whistle weatherstrip (3) beginning by A to beyond B.

5. Position the new anti-whistle weatherstrip (3) at the point marked B.

6. Press the rubber, beginning with the point marked B. Make sure that the "nose" is fitted over the edge of the door. Remove the rest of the protective foil (2) and press the rest of the strip in place.



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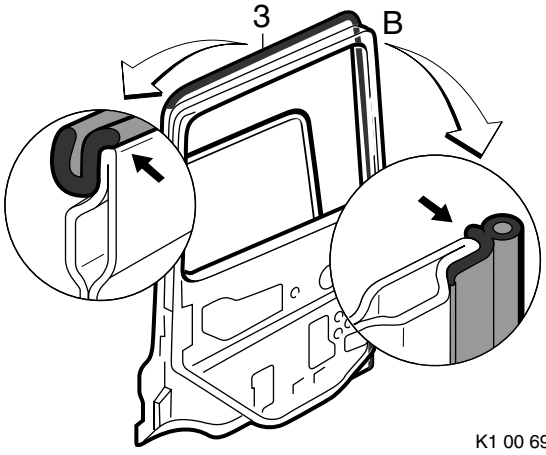
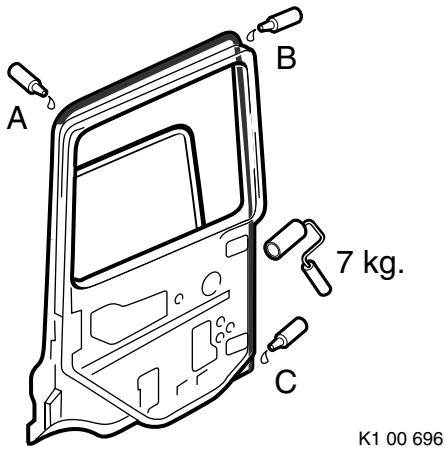


K1 00 695

7. When the whole anti-whistle weatherstrip is in place, secure areas A, B and C by applying a drop of superfast adhesive, see "Technical data".

8. Using a wallpaper roller for example, press the anti-whistle rubber over the whole glued area . Apply a force of approx. 7 kg manually.

9. Install the door.



4.24 REMOVAL AND INSTALLATION, RAISED ROOF

Removing raised roof

1. Remove the interior compartments and interior upholstery.

2. Disconnect the electrical connections (wiring harnesses).

3. Remove the electric roof hatch.

4. Saw the polyester roof approximately 10 cm from the bottom. Remove the polyester roof from the cab.

5. Remove the attachment bolts from the roof frame.

Notes

- There is still a 10-cm polyester edge attached to the cab. Cut through the sealing compound between this edge and the cab.
- After that, break off the polyester edge from the cab in pieces.
- Cut away as much of the sealant remnants as you can from the roof edge. A thin layer may remain.

Important tips

- Check that there is no gel coating on the inside of the polyester roof edge.
- Check that there is no finishing coat or bitumen coating on the part to be glued.
- Any damage to the paint on the frame should be repaired immediately with the right type of paint, well before the new raised roof is fitted.
- Always work in a clean area.
- Always used the specified cleaner, adhesive, activator and primer to glue the raised roof to the cab, see "Technical data". Note the drying, processing and curing times.
- Wear industrial gloves or use a special hand cream.
- Preferably use paper towels or tissues instead of cleaning rags.
- Immediately remove any splashes or spilt activator or cleaner from painted areas using paper towels or tissues.

Pre-treating the polyester roof

1. The pre-treatment described below guarantees that the entire surface which will come into contact with the adhesive will be covered with a suitable layer of primer.

2. At places where adhesive is to be applied, the polyester roof is first cleaned with a ball of crumpled cleaning towels or tissues that has been thoroughly moistened with the specified cleaning agent, see "Technical data".

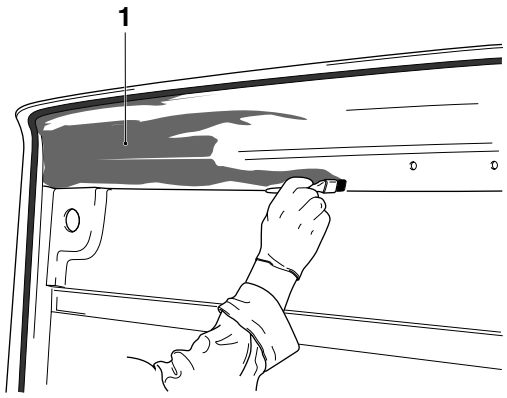
3. Lightly roughen the surface to be glued with the specified abrasive, see "Technical data".

4. Clean the sanded surface once again using a ball of crumpled cleaning towels or tissues that has been thoroughly moistened with the specified cleaning agent, see "Technical data". Allow the clean surface to dry for the specified time, see "Technical data".

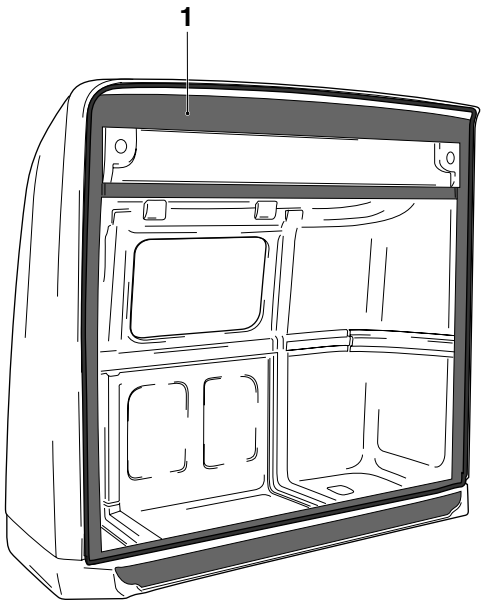
5. Check that the surface is free of abrasives and other impurities. If necessary, repeat the cleaning operation.

6. Next apply a single or at most two thin covering layers of the specified primer to the roughened surface (1) in accordance with the supplier's instructions. Allow this layer to dry for the specified time, see "Technical data".

   Note:
   Shake the can of primer well before use.



K1 01 072



K1 01 074

Pre-treating cab
Within 30 minutes before gluing, the cab roof edge should be pre-treated in the following manner:

- Clean the cut-back sealant and its immediate surroundings using the specified activator, see "Technical data". Apply the activator using a well moistened ball of crumpled paper towels or tissue; swipe it off immediately using a ball of crumpled paper towels or tissues so that only a thin layer remains. Allow the surface to dry for the specified time, see "Technical data".

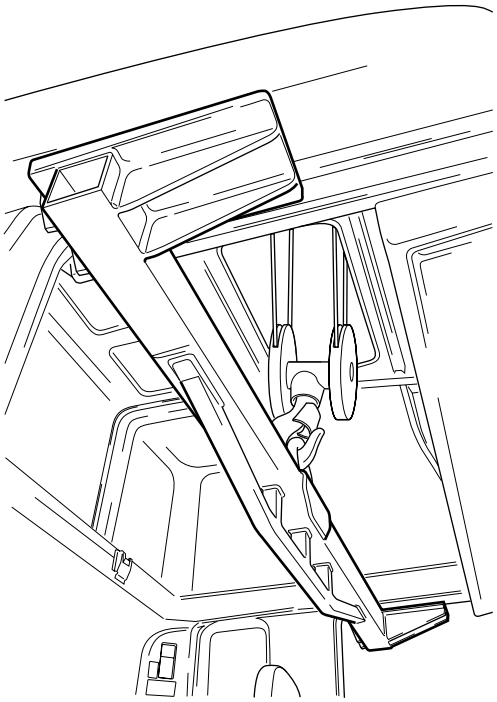
Installing raised roof
1. Using a hoist place the polyester roof on the cab to mark the position of the holes for the attachment bolts.

2. Remove the polyester roof. Drill the holes in the polyester roof.

3. Pre-treat the cab.

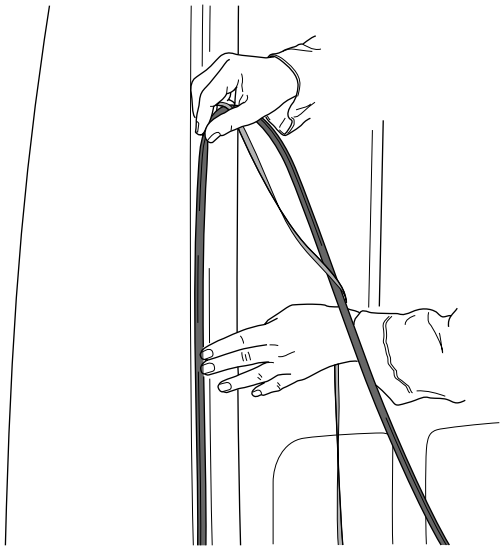
4. Pre-treat the polyester roof.

   Note:
   - Once the primer has been applied, the polyester roof must be glued to the cab with in the specified time, see "Technical data".
   - Because a film forms on the beads of adhesive (something which has a very negative impact on the quality of the adhesive), application of the beads of adhesive, gluing of the surface and fixation of the polyester roof should be realised within the specified time, see "Technical data".
   - Make sure that the polyester roof fits securely into the drip channel edge of the cab. Use stud bolts or guiding pins to fit the polyester roof correctly onto the cab.



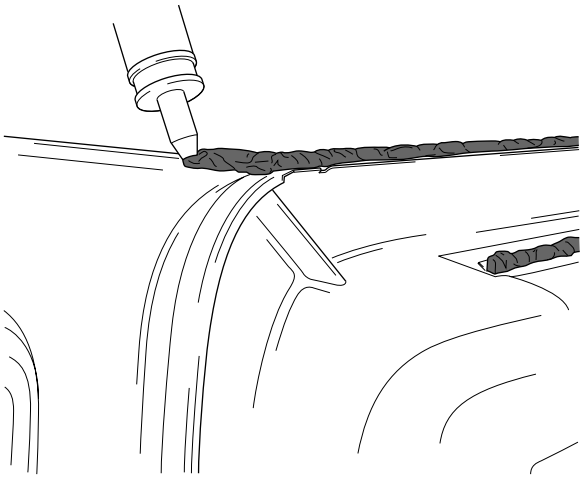
K1 01 076

5. Place the rubber seal all round.



K1 01 075

6. Apply the specified sealant, see "Technical data".
7. Place the steel plates to support the bed, to prevent the roof edge from deforming.
8. Using a hoist, place the poyester roof in the correct position on top of the cab in one go.
9. Tension the front of the polyester roof using a beam at the rear so that it covers the rubber at the front completely to prevent black sealant streaks on the cab roof.
10. Fix the polyester roof to the inside ofthe cab using the attachment bolts; tighten the attachment bolts to the specified torque, see "Technical data".



K1 01 073

Setting
Take note of the full setting time when applying the sealant. See "Technical data". Only when it has fully set will the glued joint be able to bear the full load.

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1. SAFETY INSTRUCTIONS

1.1 SAFETY INSTRUCTIONS

General
The cab is equipped with a hydraulic tilting mechanism. The pump is located on co-driver's side at the rear of the cab. The cab locks are opened hydraulically during pumping.

Before tilting the cab, make sure that the doors are closed, that there are no loose items in the cab and that the gear lever is in neutral. Tilt the cab fully forward if work must be carried out underneath the cab.

You can stop the cab tilting forward at any time by turning the cock to the reverse tilting position.

When working on a tilted cab (for example when welding, spray-painting or applying bitumen coatings), be sure to cover the piston rod of the lifting cylinder. Welding spatter and paint on the piston rod will inevitably cause damage to the oil seal.

Inspection after a collision
Before tilting the cab after a collision, check the cab rests, the cab hinges and the attachment of the lifting cylinder to the chassis member and cab for cracks.

If the vehicle has been involved in a collision, the cab must under no circumstances be tilted without due precautions. The end stop in the lifting cylinder may be damaged, which might cause the cab to shoot past its end stop.

If possible, suspend the cab in slings and put a stand in front of the cab. Make sure that there is no one in front of the cab while it is being tilted.

After a collision, **always** check the lifting cylinder for internal damage. Replace the lifting cylinder if damaged or if in doubt.

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2. GENERAL

2.1 CAB SUSPENSION

The F230 cab is attached to the chassis at four different points. Various cab suspension versions are possible.

Day cab
Standard coil spring suspension with optional air suspension at the front.

Sleeper cab
Standard coil spring suspension with optional air suspension all round.

Spring suspension
The cab is attached to the chassis both at the back and the front by coil spring.
elements. These elements are adjustable. There is a stabiliser at the front.
At the back, the cab is damped laterally by two horizontal dampers.
In the day cab model the horizontal dampers are pointed outwards.
In the sleeper cab model the horizontal dampers are pointed inwards.

Air suspension
The cab is attached to the chassis both at the back and the front by air suspension elements. The air suspension elements consist of an air bellows with an internal shock absorber. The system is equipped with height control valves. The system has a stabiliser at the front. At the back, the cab is damped laterally by two horizontal dampers.

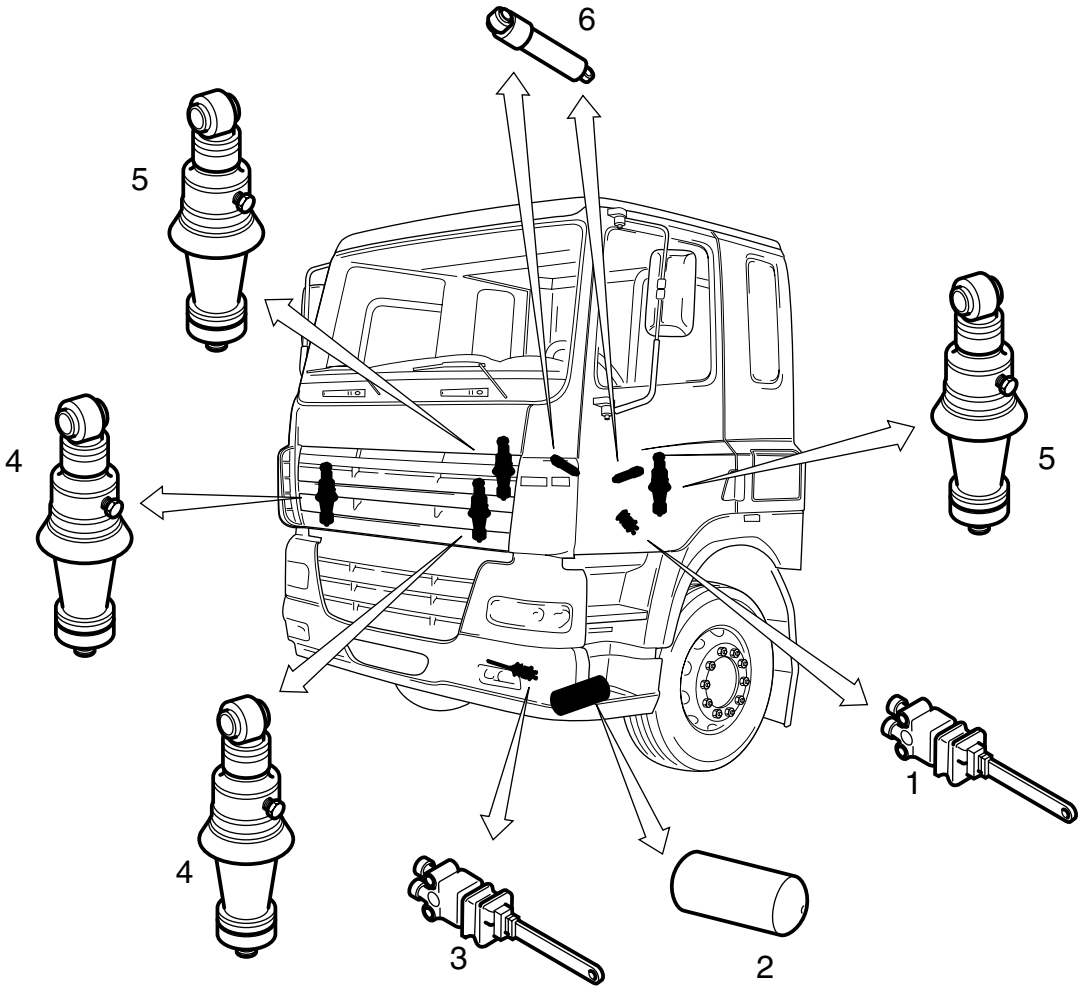
Suspension with coil spring and air suspension elements (optional on day cab)
The cab is attached to the chassis at the front by air suspension elements. The air suspension elements consist of an air bellows with an internal shock absorber.
The system is equipped with a height control valve.
At the back, the cab is damped laterally by two horizontal dampers.
The cab is attached to the chassis at the rear by coil spring elements. These elements are adjustable. The system has a stabiliser at the front.

Tilting the cab with air suspension
When a cab with air suspension is lifted, the height control valves register a rise in the cab level which causes the air bellows to discharge. Because of its weight the cab drops at the front onto the stop in the spring element. This means the cab can be tilted without problem and no extra valves are necessary. No anti-dive valves are fitted to the air suspension model.

2.2 OPERATION OF THE CAB AIR SUSPENSION

The day cab has air suspension at the front as an option.
The sleeper cab has air suspension all round as an option.

The air suspension consists of an air bellows with an internal shock absorber.
The system is equipped with height control valves.

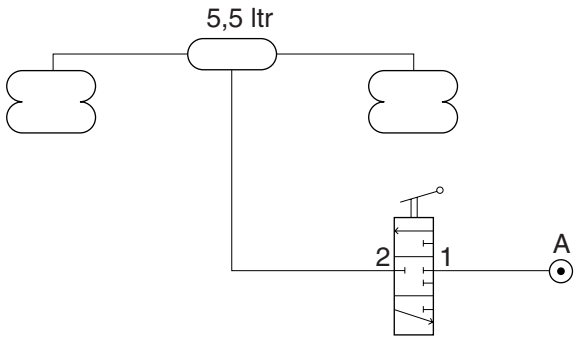


K1 00 922

Legend

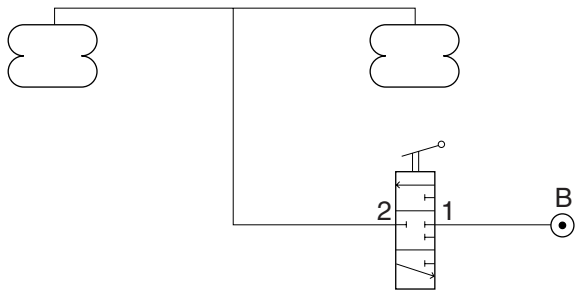
Item	Description	Location	Note
1	Height control valve	Cab, rear left	
2	Air reservoir	Front left behind bumper	Capacity 5.5 litres
3	Height control valve	Front left behind bumper	
4	Spring element	Left- and right-hand sides under cab front	
5	Spring element	Left- and right-hand sides under cab rear	
6	Horizontal damper	Left- and right-hand sides under cab rear	

Pneumatic diagram of front cab suspension
A = Connection for cab suspension, front



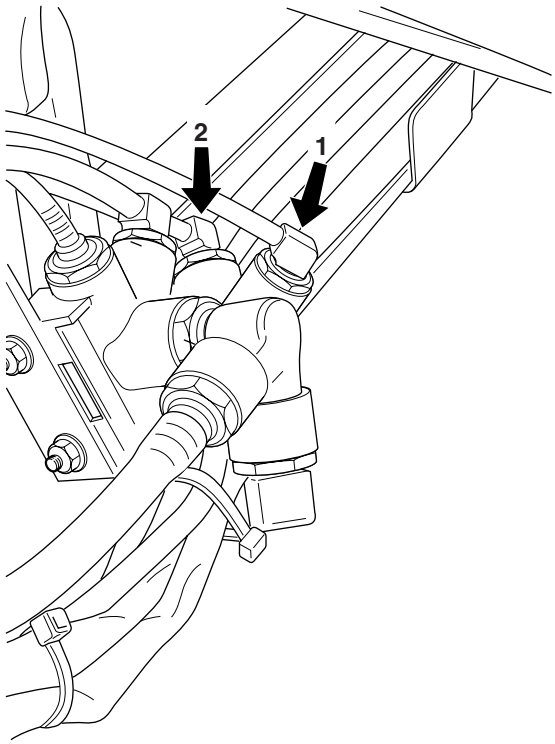
K1 00 930

Pneumatic diagram of rear
B = Connection for cab suspension, rear



K1 00 938

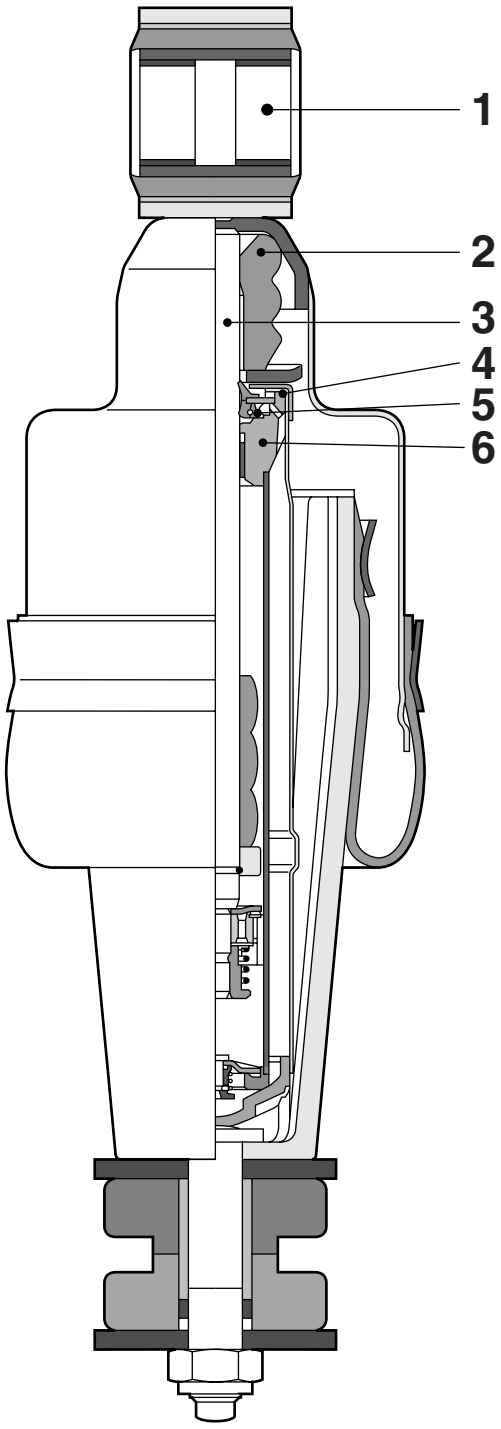
Connection of cab suspension spring elements
1 = Cab spring elements, front
2 = Cab spring elements, rear



K1 01 129

2.3 SECTIONAL DRAWING OF AIR SUSPENSION ELEMENT

1. Fixing ring
2. Rebound-rubber
3. Piston rod
4. Flange seam seal
5. Sealing ring
6. Rod guides



K1 01 451

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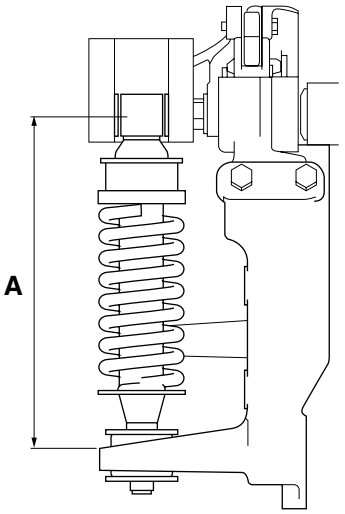
3. INSPECTION AND ADJUSTMENT

3.1 INSPECTION AND ADJUSTMENT, CAB SUSPENSION WITH COIL SPRING ELEMENTS

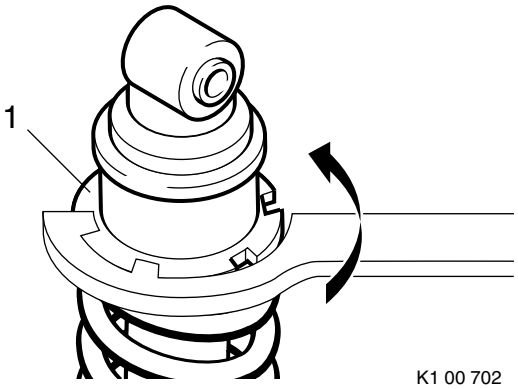
Inspecting and adjusting front cab suspension

1. Remove the corner pieces.
2. Measure distance "A" (centre threaded end to top of bracket), see "Technical data".



K1 01 013

3. Depending on the increased cab weight, adjust the spring elements by turning the ring (1).
   The spring elements can be adjusted at four levels. See "Technical data".
4. Fit the corner pieces.



K1 00 702

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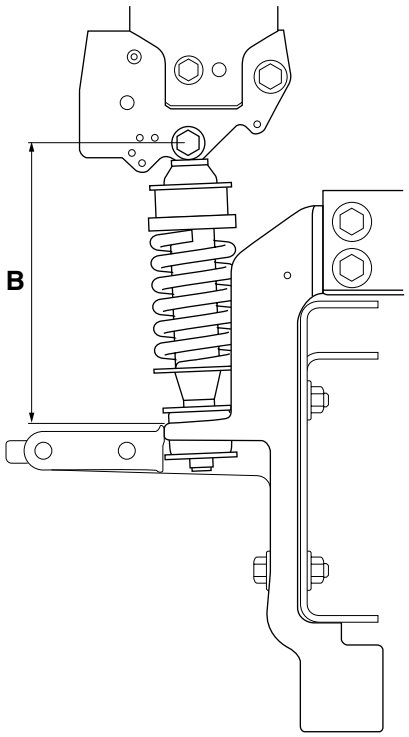
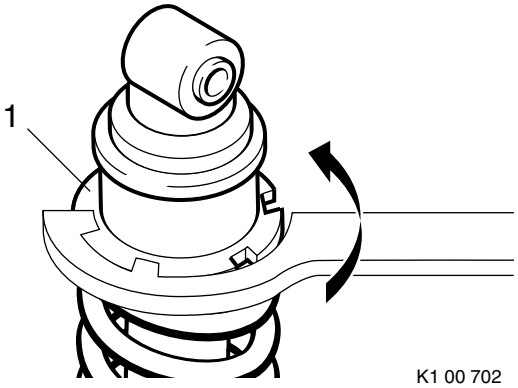
Inspecting and adjusting rear cab suspension

1. Measure distance "B" (centre threaded end to top of bracket) See "Technical data".



K1 01 014

2. Depending on the increased cab weight, adjust the spring elements by turning the ring (1).
   The spring elements can be adjusted at four levels. See "Technical data".



K1 00 702

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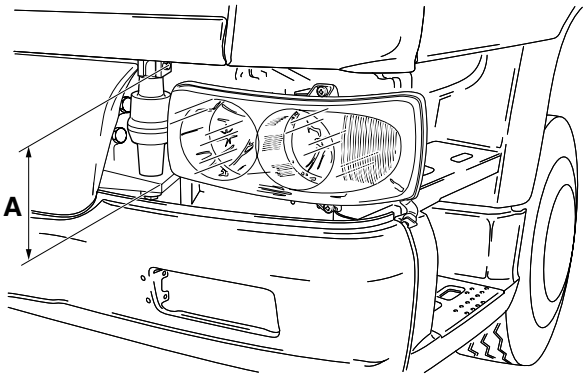
3.2 INSPECTION AND ADJUSTMENT, CAB SUSPENSION WITH AIR SUSPENSION ELEMENTS

Inspecting and adjusting cab front

1. Remove the corner pieces.
2. Bring the system up to maximum service pressure.
3. Measure distance "A"(centre of bolt to top of bracket). See "Technical data".

Risk of being trapped when air bellows blow off.

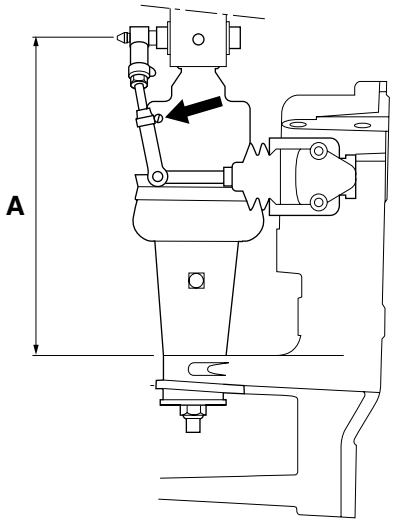
4. Remove the rod for height control between the height control valve and the cab. Lift the siphon of the height control valve. The cab suspension will now blow off using the height control valve.



K1 01 028

Note:
The air bellows must be vented before each new measurement. After this, the height control valve will adjust the cab to the set height.

5. Check the distance "A".
6. If the distance "A" needs to be adjusted, loosen the hose clamp on the operating rod of the height control valve and tighten it at the correct height.
7. Fit the corner pieces.



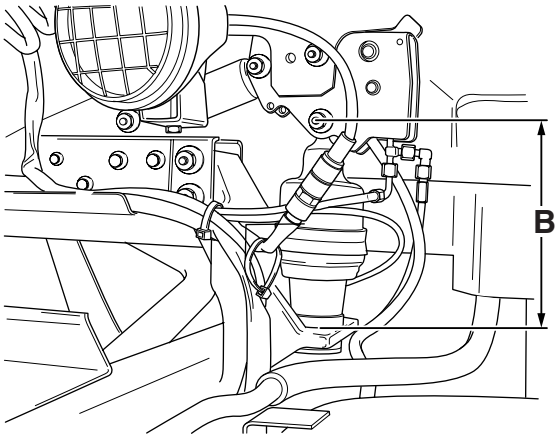
K1 01 413

Inspecting cab rear

1. Bring the system to maximum service pressure.
2. Measure distance "B" (centre threaded end to top of bracket). See "Technical data".

Risk of being trapped when air bellows blow off.

3. Remove the rubber connection for height control between the height control valve and the cab. Lift the siphon of the height control valve. The cab suspension will now blow off using the height control valve.

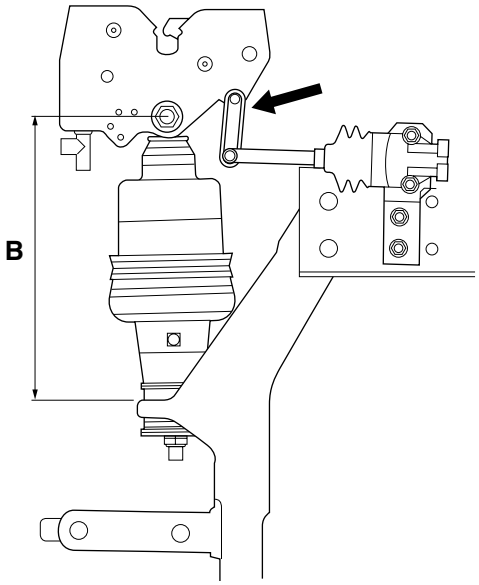


K1 00 942

4. Fit the rubber connection. Check the set distance (B)

Notes

- The height "B" cannot be adjusted.
- The air bellows must be vented before each new measurement.



K1 01 112

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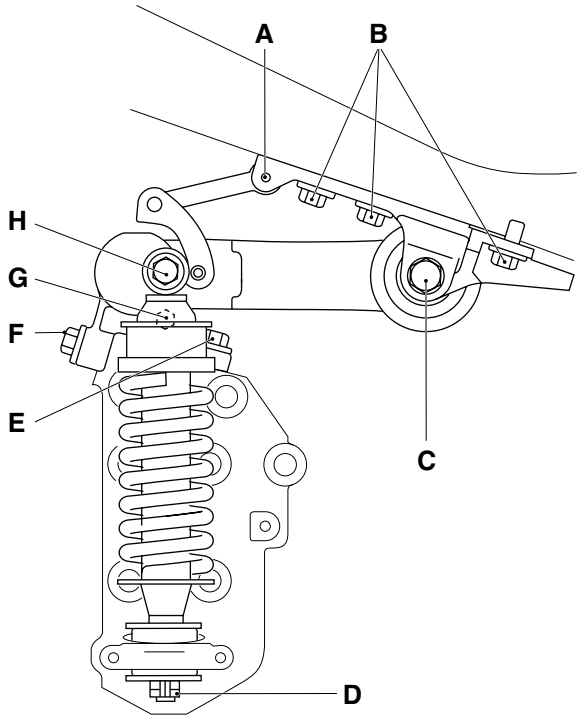
4. REMOVAL AND INSTALLATION

4.1 REMOVAL AND INSTALLATION, CAB STABILISER

When working on the cab suspension provide extra supports for the cab to avoid the risk of being trapped.

Removing cab stabiliser

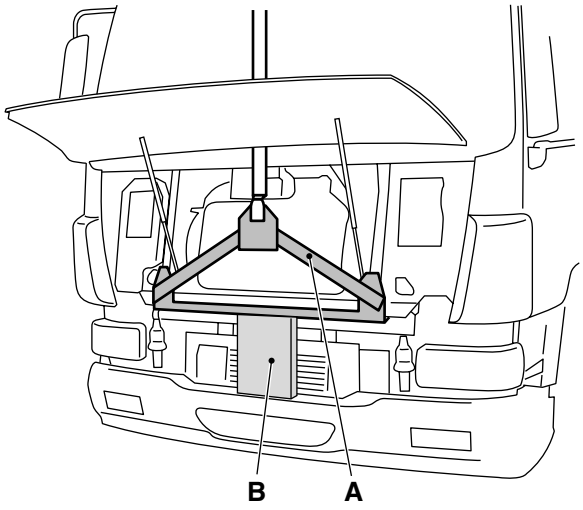
1. Remove the vehicle grille.
2. Tilt the cab forward.
3. Loosen both attachment nuts from the bolts (C).
4. On both sides loosen the two rearmost attachment bolts (E) from the cab bearing brackets.
5. Undo the attachment bolts (A) on both sides of the tilt assist mechanism.



K1 01 077

6. Tilt the cab back.
7. Fit the yoke (A) (DAF no. 1329487) at the front.
8. Remove the spring element on driver side and put to one side. The air pipes, if relevant, do not need to be undone.
9. On co-driver side remove the uppermost attachment bolt (H) from the spring element.

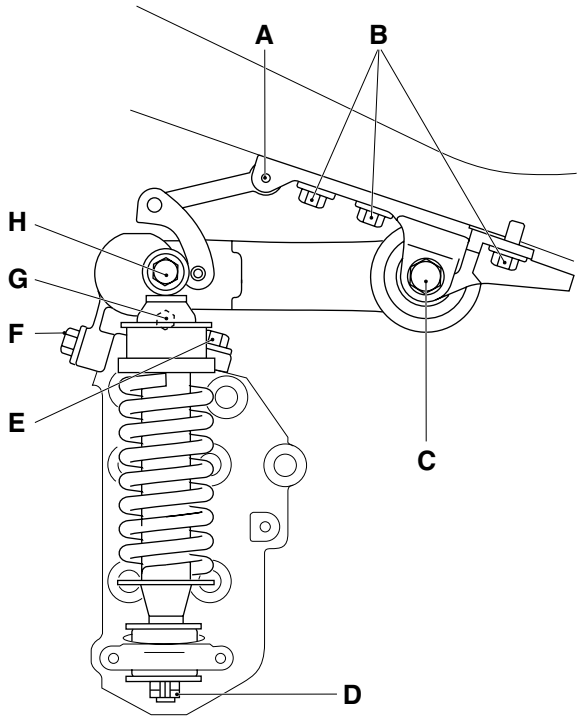
   Note:
   Do not raise the cab more than 10 cm because of the available length of piping and cables.
10. Tilt the cab.



K1 01 063

Place a block (B) or similar support under the cab before working underneath it.

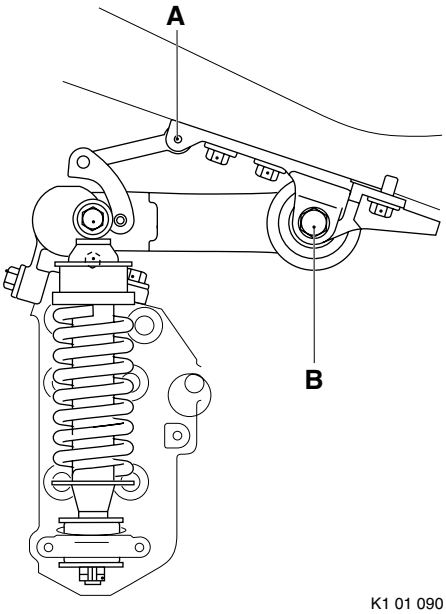
11. Remove the rearmost attachment bolts (A, C and E).
12. Remove the foremost attachment bolts (F) on both sides of the cab bearing brackets.
13. Remove the stabiliser.



K1 01 077

Installing cab stabiliser

1. Place the stabiliser in position.
2. Fit the attachment bolts (B) of the silentblocks with the heads pointing outwards. Apply locking compound to the attachment bolts. See "Technical data". Hand-tighten the attachment nuts.
3. Fit the attachment bolts of the tilt assist mechanism (A) and tighten them to the specified torque, see "Technical data".



K1 01 090

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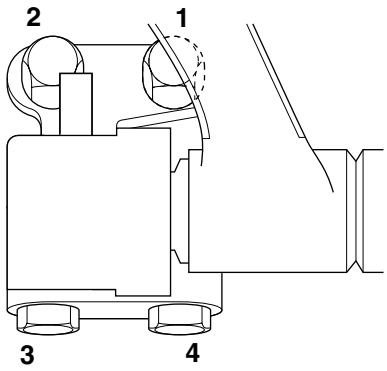
4. Position the stabiliser bearing brackets in relation to the chassis supports.

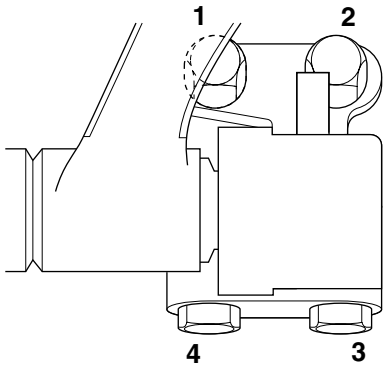
5. Fit the attachment bolts (2, 3 and 4) on the right-hand side of the vehicle. Tighten the bolts but not yet to the specified torque.

6. Tighten the attachment bolts (3 and 4) on the right-hand side to the specified tightening torque, see "Technical data".



K1 01 021

7. Fit the attachment bolts (2, 3 and 4) on the left-hand side of the vehicle but do not yet tighten these bolts to the specified torque. The stabiliser still needs to be movable

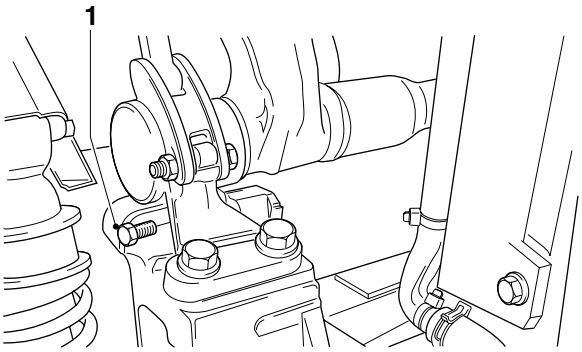


K1 01 022

Note:
Check that the threaded hole for the prestressed bolt in the aluminium chassis bracket has a screw thread.

8. Place an M8x50 mm bolt (1) to apply prestress to the cab stabiliser bearing support. Tighten the prestressed bolt to the specified torque. See "Technical data".

9. On driver side fit the spring element and tighten the attachment bolt at the top and the attachment nut at the bottom to the specified tightening torque, see "Technical data".



K1 01 066

5

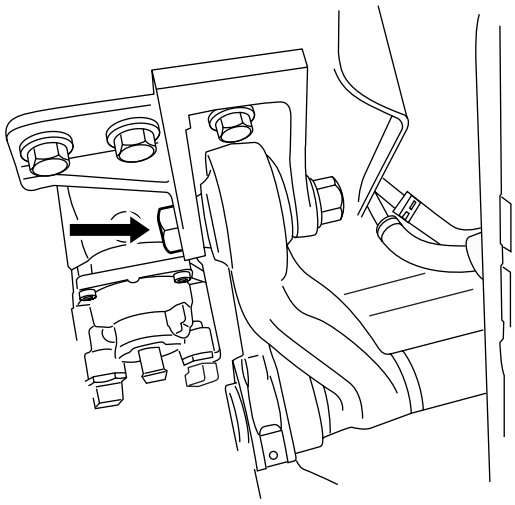
10. If applicable, fit the operating rod for the height control valve.

11. On co-driver side fit the uppermost attachment bolt of the spring element and tighten it to the specified tightening torque, see "Technical data".

12. Remove the block or the support from under the cab and lower the cab. Remove the lifting yoke.

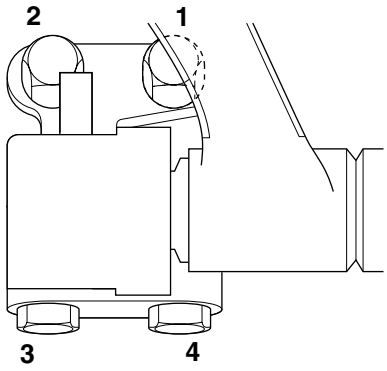
13. Check whether the gear lever is in neutral. Tilt the cab forward.

14. Tighten the attachment bolts of the silentblocks to the specified tightening torque, see "Technical data".



K1 01 093

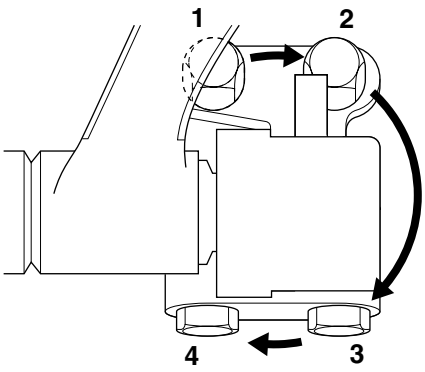
15. Insert the attachment bolt (1) on the right-hand side of the vehicle and tighten both attchment bolts (1 and 2) on the rear to the specified torque, see "Technical data".



K1 01 021

16. Fit the attachment bolt (1) on the left-hand side of the vehicle. Tighten the attachment bolts (1, 2, 3 and 4) of the stabiliser bearing bracket in the specified order and to the specified tightening torque, see "Technical data".

17. Fit the vehicle grille.



K1 00 941

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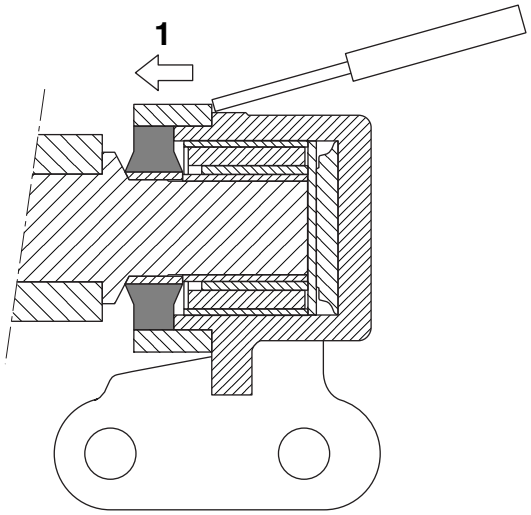
4.2 REMOVAL AND INSTALLATION, CAB STABILISER BEARING BRACKET

When working on the cab suspension provide extra supports for the cab to avoid the risk of being trapped.

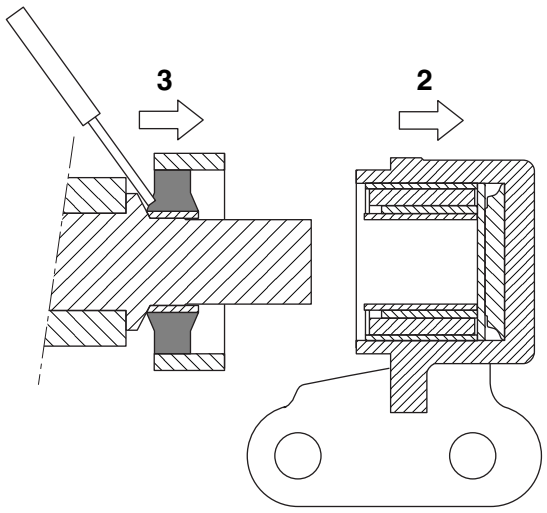
Removing cab stabiliser bearing bracket

1. Remove the cab stabiliser.
2. Using a punch, remove the outer ring (1) and rubber seal from the bearing bracket.



K1 00 939

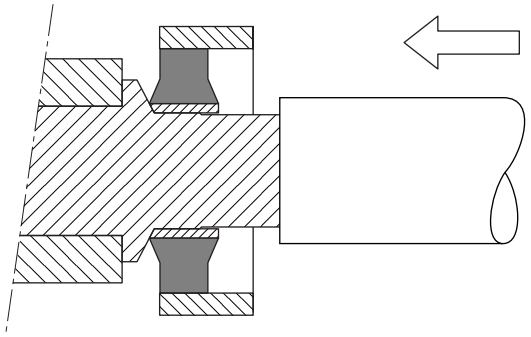
3. Remove the bearing bracket (2).
4. Using a punch, remove the inner ring (3) from the cab stabiliser.



K1 00 940

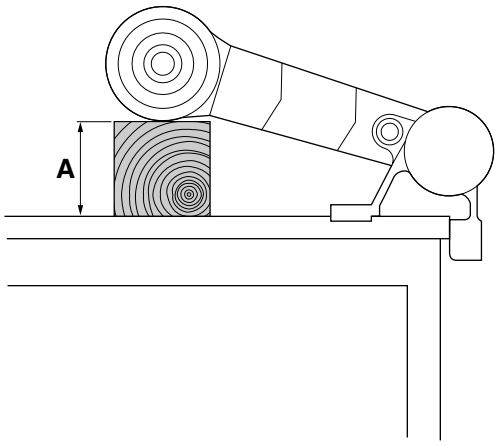
Installing cab stabiliser bearing bracket

1. Fit the rubber seal on the cab stabiliser using a steel tube.



K1 01 069

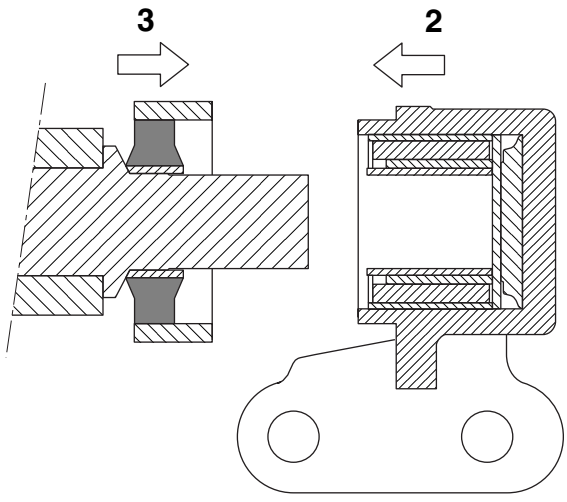
2. Position the cab stabiliser and bearing bracket as indicated, using an 80 mm block (A).



K1 01 001

3. Pull the outer ring (3) using a pulley puller (trade tool) on the bearing bracket (2).

4. Put the cab stabiliser in place.



K1 01 115

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4.3 REMOVAL AND INSTALLATION, CAB SUPPORT

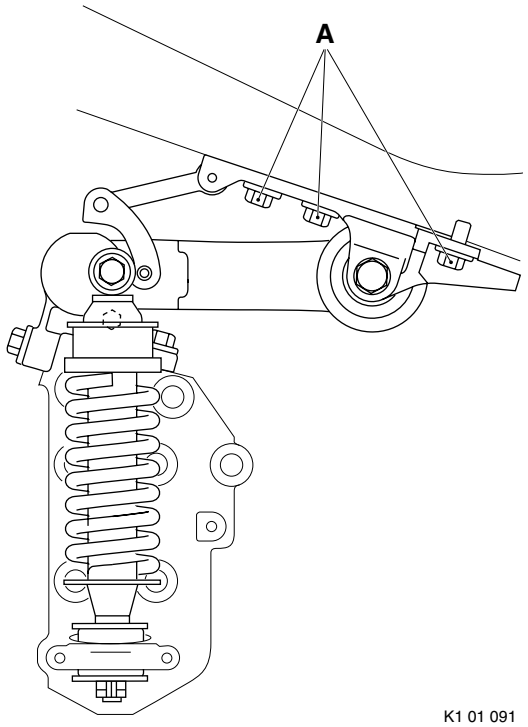
When working on the cab suspension provide extra supports for the cab to avoid the risk of being trapped.

Removing cab support

1. Remove the cab stabiliser.
2. Remove the attachment bolts (A) from the cab support and remove the cab support.

Installing cab support

1. Fit the cab support and tighten the attachment bolts to the specified torque. See "Technical data".
2. Put the cab stabiliser in place.



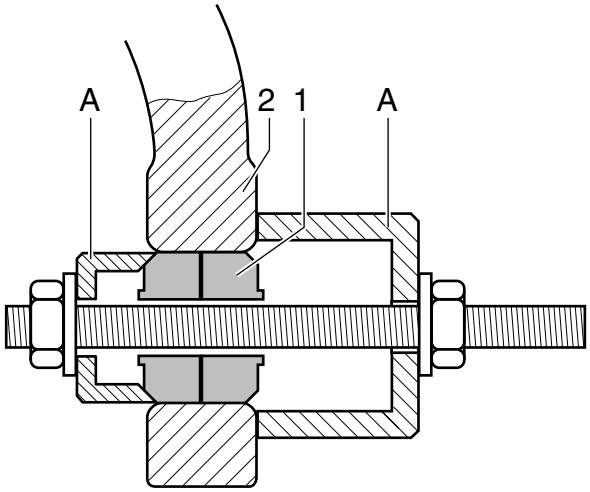
K1 01 091

4.4 REMOVAL AND INSTALLATION, CAB STABILISER SILENTBLOCKS

When working on the cab suspension provide extra supports for the cab to avoid the risk of being trapped.

Removing cab stabiliser silentblocks

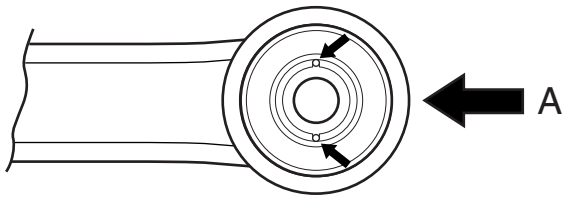
1. Remove the cab support.
2. Force the silentblock (1), using the puller (A), special tool (DAF no. 1329486), from the cab stabiliser (2).



K1 01 410

Installing cab stabiliser silentblocks

Note:
Fit the silentblocks with the marks in vertical position, as shown in the illustration (cab in driving position). The arrow (A) shows the driving direction.



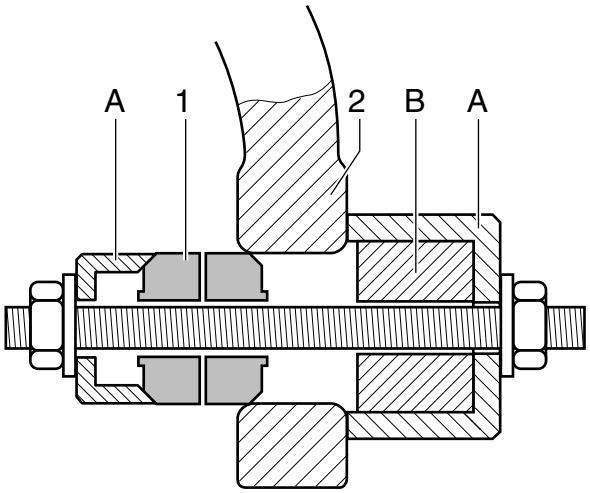
K1 01 411

1. Fit the distance ring (B), which is part of the puller, in puller (A), special tool (DAF no. 1329486).

2. Using puller (A), force the silentblock (1) into the cab stabiliser (2) up to distance ring (B).

   Note:
   Immediately stop forcing when the silentblock touches distance ring (B) to prevent the inner sleeve of the silentblock from being damaged (upset).

3. Fit the cab support.



K1 01 412

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4.5 REMOVAL AND INSTALLATION, COIL SPRING FRONT SUSPENSION

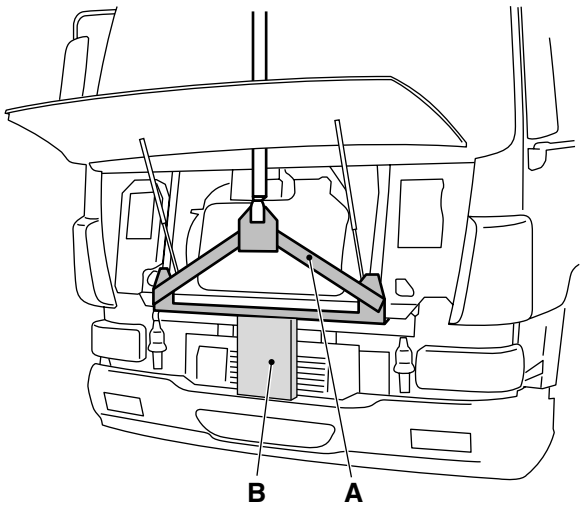
When working on the cab suspension provide extra supports for the cab to avoid the risk of being trapped.

Removing coil spring front suspension

1. Remove the corner pieces around the headlights and the vehicle grille.

   Note:
   Do not raise the cab more than 10 cm because of the available length of piping and cables.

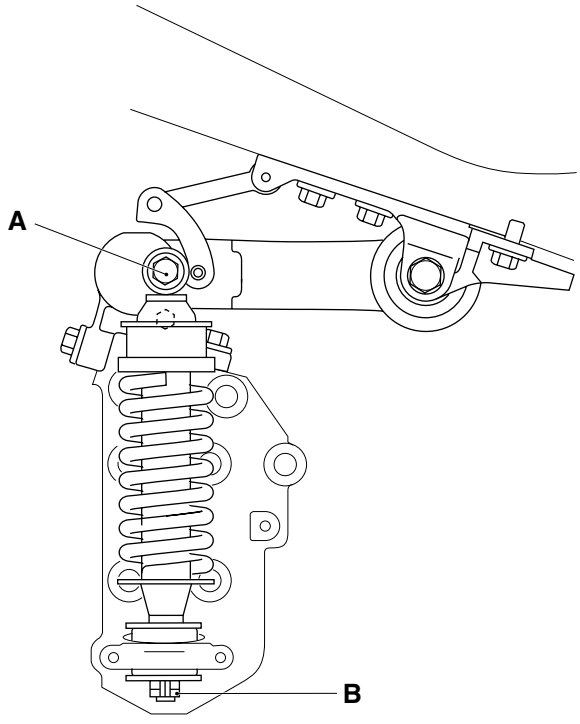
2. Place the hoist yoke (A) (DAF no. 1329487) and lift the cab at the front.



K1 01 063

Place a block (B) or similar support under the cab before working underneath it.

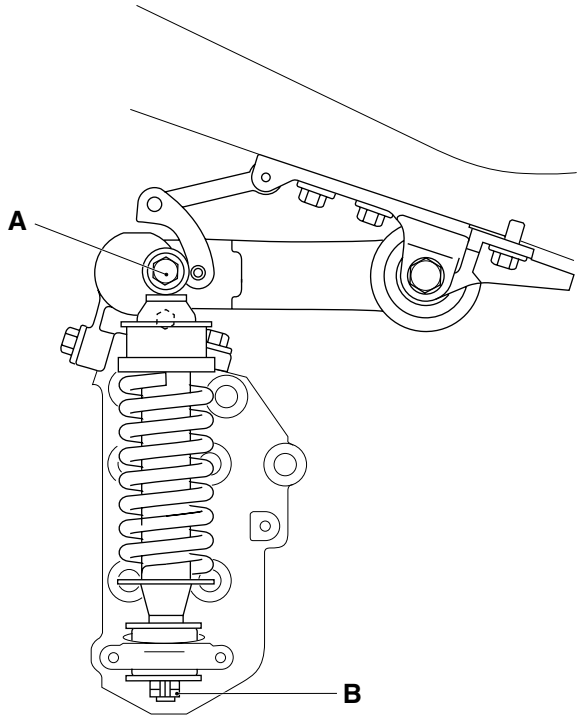
3. Remove the attachment nut (B) at the bottom.
4. Remove the attachment bolt (A) at the top.
5. Remove the spring element.



K1 01 092

Installing coil spring front suspension

1. Put the spring element in place. Fit the attachment bolt (A) at the top and tighten it to the specified tightening torque, see "Technical data".
2. Remove the block (or support)
3. Lower the cab carefully and fit the attachment nut (B) at the bottom. Tighten the attachment nut to the specified torque, see "Technical data".
4. Remove the lifting yoke.
5. Fit the corner pieces and the vehicle grille.

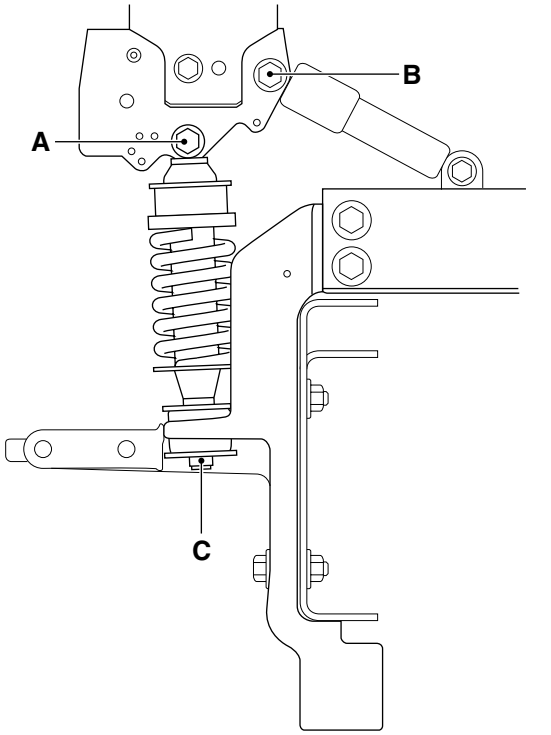


K1 01 092

4.6 REMOVAL AND INSTALLATION, REAR COIL SPRING SUSPENSION

Removing rear coil spring suspension

1. Tilt the cab forward.
2. Remove attachment bolt (B) from the horizontal damper.
3. Remove attachment bolt (A) from the spring element at the top.
4. Lay the cab locking mechanism to one side.
5. If the vehicle is equipped with a day cab, remove the attachment bolt at the bottom.
   If the vehicle is equipped with a sleeper cab, remove the attachment nut (C) at the bottom.
6. Remove the spring element.



K1 01 114

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Installing rear coil spring suspension

1. Put the spring element in place.
2. If the vehicle is equipped with a day cab, fit the attachment bolt at the bottom. Tighten the bolt to the specified torque. See "Technical data".
   If the vehicle is equipped with a sleeper cab, fit the attachment nut (C) at the bottom. Tighten the nut to the specified tightening torque, see "Technical data".
3. Fit the cab locking mechanism. Fit attachment bolt (A) but do not tighten it yet.
4. Fit attachment bolt (B) of the horizontal damper. Do not yet tighten the bolt to the specified tightening torque.
5. Tilt the cab back.
6. Tighten attachment bolt (B) of the horizontal damper to the specified tightening torque, see "Technical data".
7. Tighten attachment bolt (A) of the cab locking mechanism to the specified tightening torque, see "Technical data".

4.7 REMOVAL AND INSTALLATION, FRONT AIR SUSPENSION

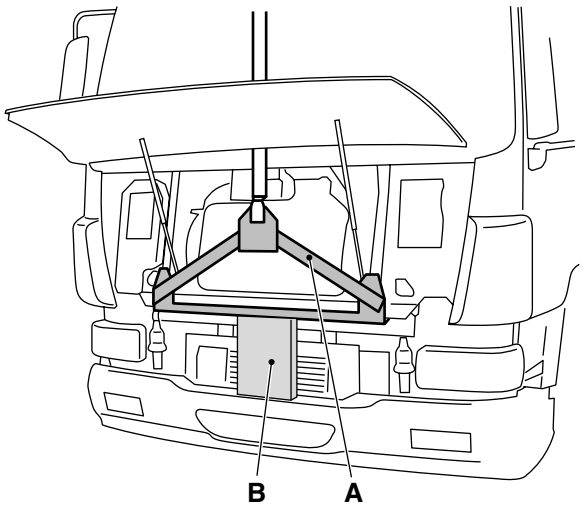
When working on the cab suspension provide extra supports for the cab to avoid the risk of being trapped.

Removing front air suspension

1. Remove the corner pieces around the headlights and the vehicle grille.

   Note:
   Do not raise the cab more than 10 cm because of the available length of piping and cables.

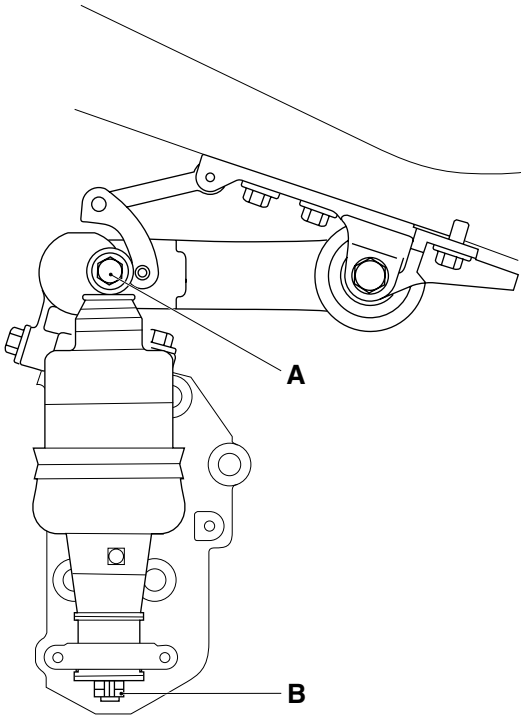
2. Place the hoist yoke (A) (DAF no. 1329487) and lift the cab at the front.



K1 01 063

Place a block (B) or similar support under the cab before working underneath it.

3. Remove the attachment nut from the spring element (B) at the bottom.
4. Remove attachment bolt (A) from the spring element at the top.
5. Remove the air pipe from the spring element.
6. Remove the spring element.



K1 01 107

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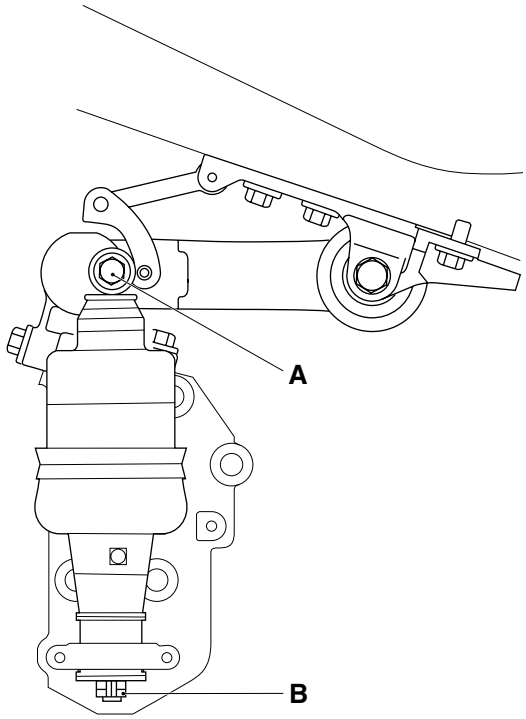
Installing front air suspension

1. Put the spring element in place. Fit the attachment bolt (A) at the top and tighten it to the specified tightening torque, see "Technical data".
2. Connect the air pipe.
3. Remove the block (or support)
4. Lower the cab carefully and fit the attachment nut (B) at the bottom. Tighten the nut to the specified tightening torque, see "Technical data".
5. Remove the lifting yoke.
6. Fit the corner pieces and the vehicle grille.



K1 01 107

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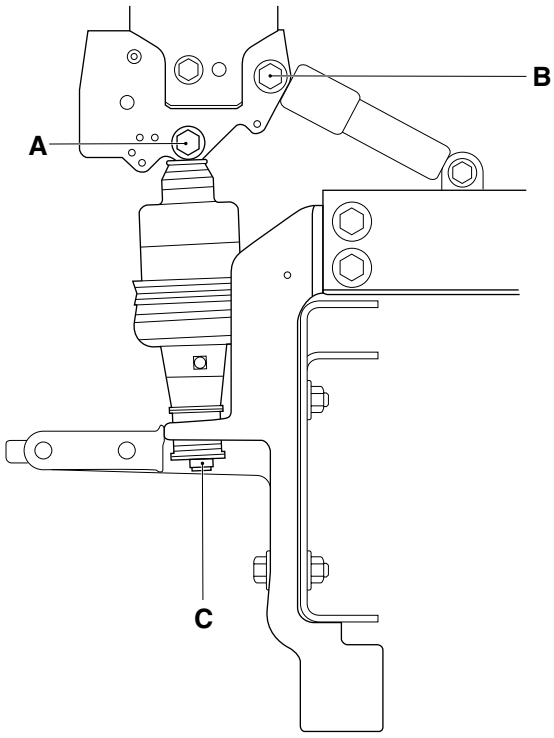
4.8 REMOVAL AND INSTALLATION, REAR AIR SUSPENSION

Removing rear air suspension

1. Tilt the cab forward.
2. Remove the air pipes
3. Remove attachment bolt (B) from the horizontal damper.
4. Remove attachment bolt (A) from the cab locking mechanism..
5. Lay the cab locking mechanism to one side.
6. Remove the attachment nut (C) at the bottom.
7. Remove the spring element.



K1 01 108

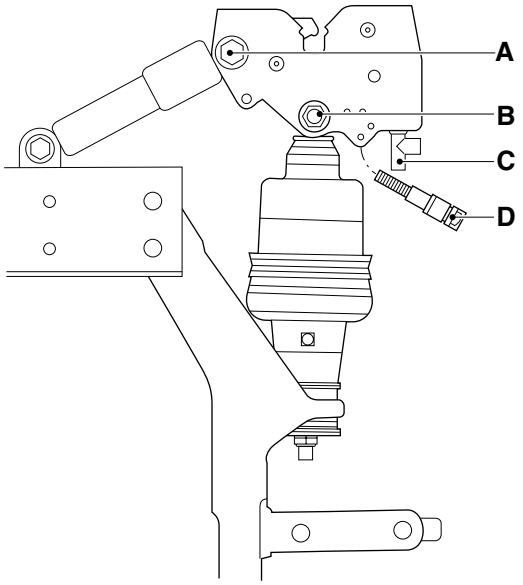
Installing rear air suspension

1. Put the spring element in place.
2. Connect the air pipe.
3. Fit the attachment nut (C) at the bottom. Tighten the nut to the specified tightening torque, see "Technical data".
4. Fit the cab locking mechanism. Fit attachment bolt (A) but do not tighten it yet.
5. Fit attachment bolt (B) of the horizontal damper. Do not yet tighten the bolt to the specified tightening torque.
6. Tilt the cab back.
7. Tighten attachment bolt (B) of the horizontal damper to the specified tightening torque, see "Technical data".
8. Tighten attachment bolt (A) of the cab locking mechanism to the specified tightening torque, see "Technical data".

4.9 REMOVAL AND INSTALLATION, CAB LOCKING MECHANISM

Removing cab locking mechanism

1. Tilt the cab.
2. Switch the tilting pump to reverse tilting.
3. Remove the proximity switch connector (D) on the right-hand side.
4. Remove the hydraulic line (C) and plug it. Collect any oil flowing out of the system.
5. Remove the attachment bolts (A) and (B).
6. Remove the cab lock.



K1 01 109

Installing cab locking mechanism

1. Fit the cab locking mechanism. Do not yet tighten the attachment bolts to the specified tightening torque.
2. Connect the connector (D) of the proximity switch.
3. Connect the hydraulic line (C).
4. Carefully lower the cab. When doing so, ensure that the locks are open.
5. Tighten the attachment bolts to the specified torque. See "Technical data".
6. Bleed the tilting mechanism.

5

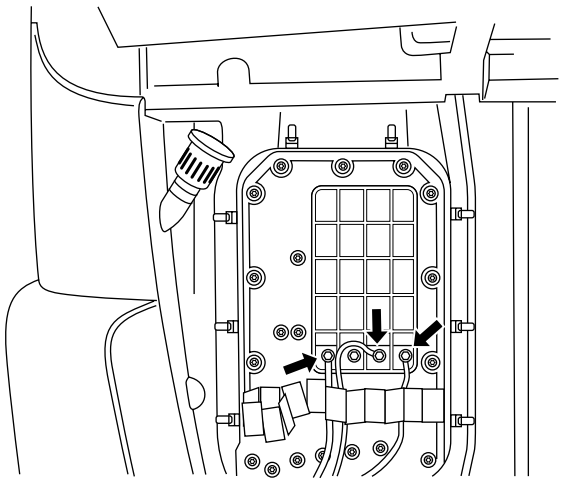
4.10 REMOVAL AND INSTALLATION, COMPLETE CAB

Only use approved lifting equipment. Comply with general safety instructions when working with lifting equipment.

Removing complete cab

1. Remove the battery earth cables.
2. Put the gear lever in 2nd or 4th gear. Put the wheels in the straight-line position.
3. Open the cab grille.

   Note:
   Work on the air conditioning unit should only be carried out by qualified personnel.
4. If present, drain the air conditioning unit.
5. Drain the clutch fluid.
6. Drain the coolant.
7. Remove the covers from around the headlights.
8. Remove the vehicle grille.
9. Remove the cover from the cab lead through.
10. Check that the wiring harnesses are marked. If not, mark them.
11. Detach the connectors in the cab lead through.
12. Remove the cover at the bottom of the cab lead through.
13. Disconnect the wiring harnesses.
14. Detach the positive and the earth leads in the cab lead through.
15. Remove the air pipe from the splitter control valve.
16. Remove the hose from the main clutch cylinder.
17. Tilt the cab.
18. Loosen the wiring harnesses from the cab lead through as much as is necessary.

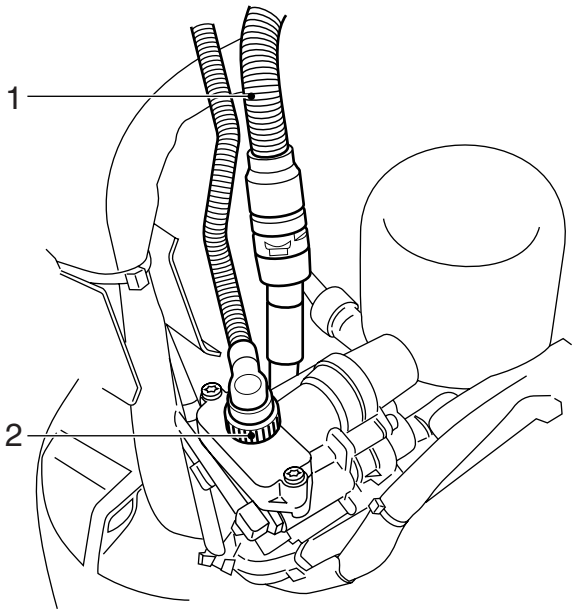


K1 01 035

19. Loosen the wiring harness (1) from the lighting unit as much as is necessary.

20. Disconnect the connector (2) from the air supply unit. Loosen the wiring harness as much as is necessary.

21. If present, release the fuel pipe from the cab heater at the rubber joint.



K1 01 032

22. On the steering box side loosen the wiring harness that goes to the lighting unit (1) as much as is necessary. Loosen the connector.

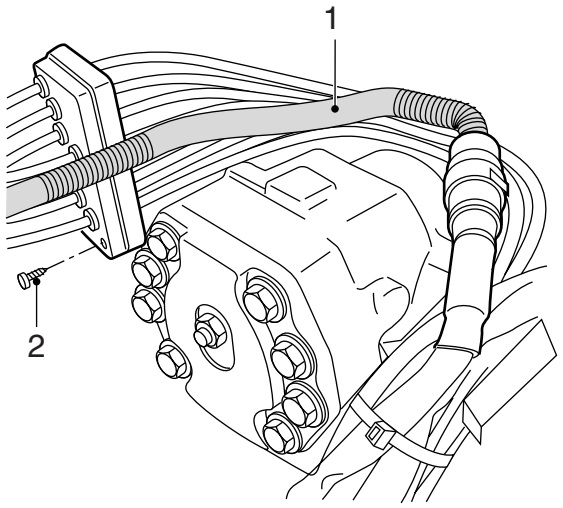
23. Take the pressure off the air system.

24. Remove the attachment bolts (2) from the air duct block and put the loose half to one side.

25. Loosen one of the universal joints of the steering shaft (which one depends on the operation to be performed; either the universal joint beneath the steering wheel or the universal joint on the steering box). Before loosening, mark the position of the universal joint in relation to the steering shaft.

26. Remove the clamp bolt from the universal joint.

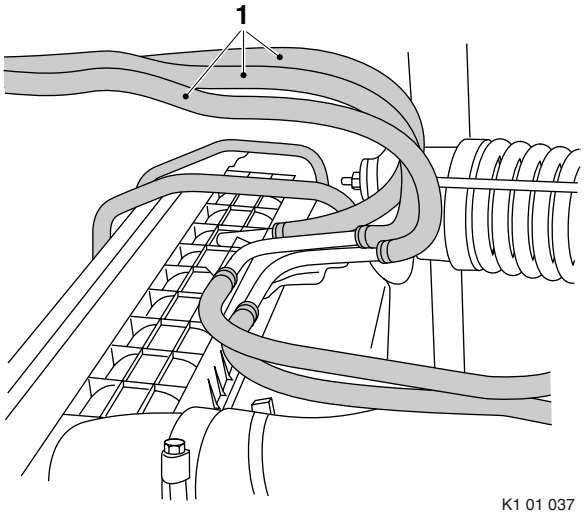
27. Remove the universal joint from the steering box input shaft.



K1 01 036

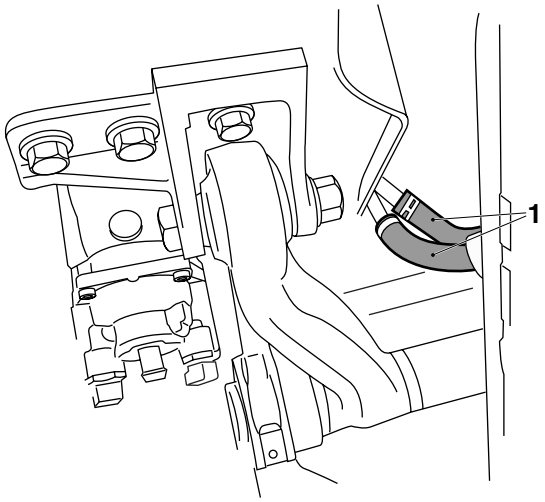
© 200346

28. Disconnect the three bleed hoses (1) that are connected to the expansion reservoir.



K1 01 037

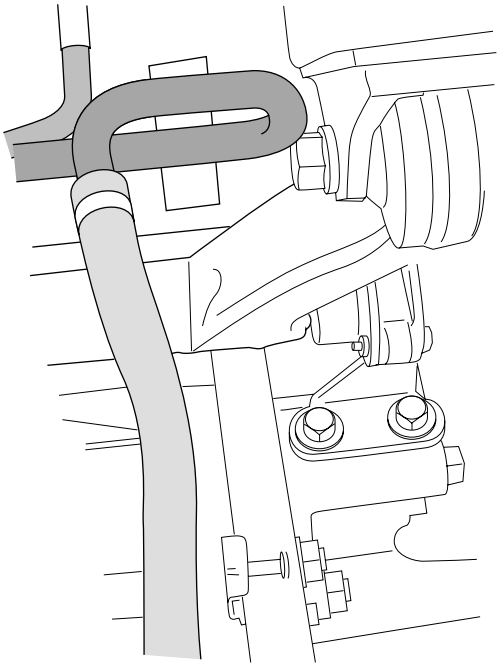
29. Remove the heater hoses (1) on the steering box side.



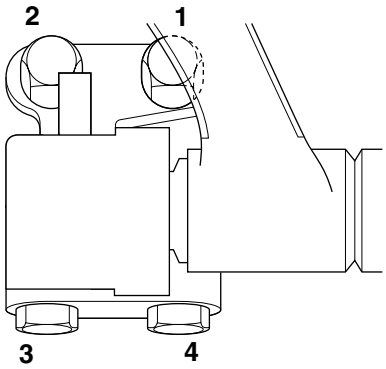
K1 01 067

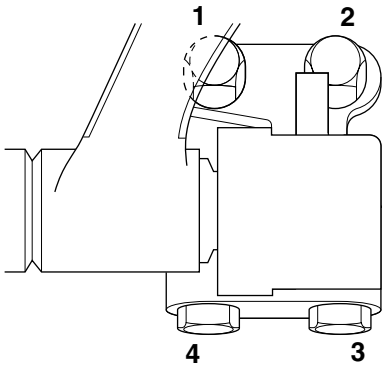
30. Remove the heater hose on the side of the air supply unit.

31. Slacken the attachment bolt that holds the lifting cylinder to the cab by one turn.



K1 01 039





K1 01 648

32. On both sides remove the rearmost bolts (1) from the stabiliser bearing bracket and slacken the bolts (2) on both sides by one turn

33. Tilt the cab back.

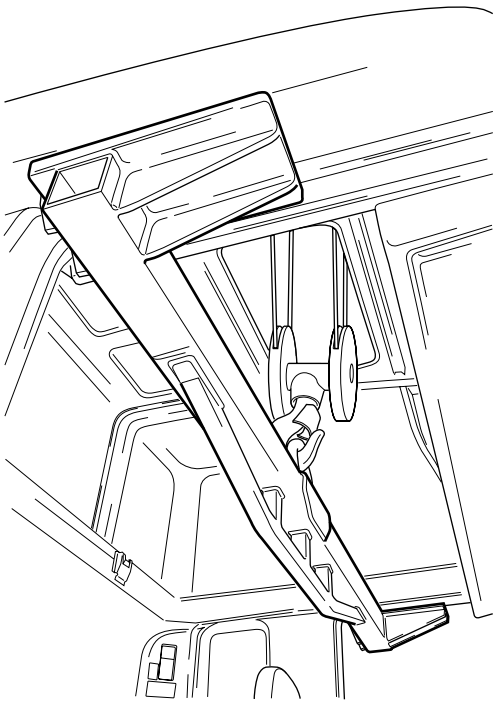
34. Remove the glass from the roof hatch.

35. Open both doors and secure them.

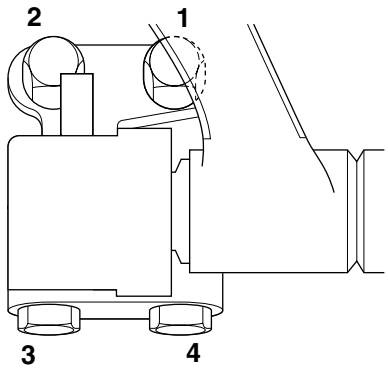
36. Lower the hoist through the roof hatch and fit the lifting yoke.

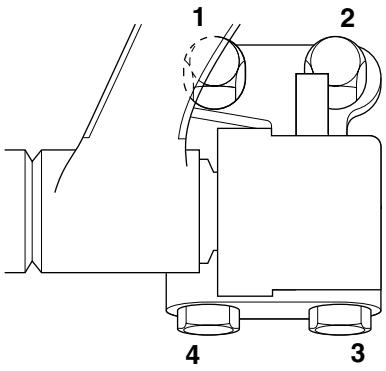
37. With the cab tilting mechanism in the lifting position, make a number of pump strokes until both cab locks are disengaged.

38. Slacken the attachment bolts for the cab suspension.



K1 01 076





K1 01 648

39. On both sides remove the foremost bolts (3 and 4) from the stabiliser bearing bracket and remove the bolts (2) at the rear.

40. Hoist the cab carefully a little way so that the bolts can be removed from the cab suspension.

41. Remove the attachment bolt that attaches the lifting cylinder to the cab.

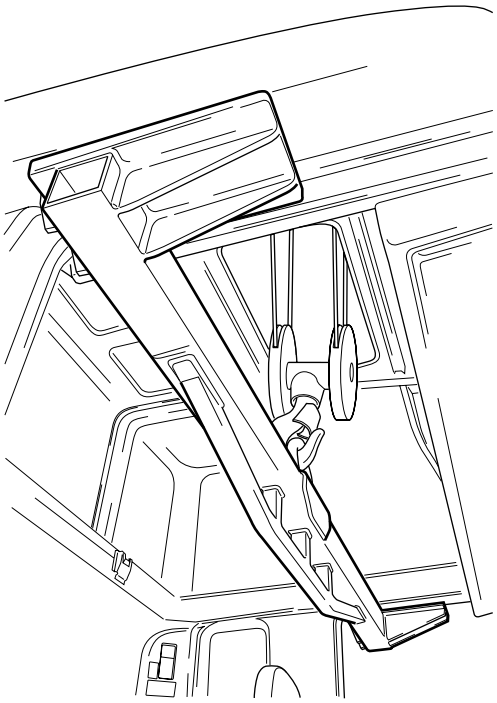
42. Hoist the cab carefully a little way and check that all pipes and wiring harnesses are disconnected.

43. Carefully lift the cab from the vehicle. Place the cab on a cab support or another suitable frame.

Installing complete cab

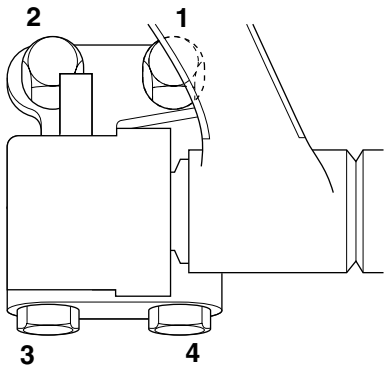
When working on the cab suspension provide extra supports for the cab to avoid the risk of being trapped.

1. Fit the hoist yoke.
2. Before placing the cab on the chassis supports check to see if the wiring holes in the aluminium chassis are accessible. This makes the work easier.
3. Check that the contact surfaces of the stabiliser bearing brackets and the chassis supports are clean.
4. Check that the gear lever is in 2nd or 4th gear.
5. Place the cab above the chassis and lower it carefully onto the chassis supports. Check that the wiring harnesses and any piping do not get trapped.



K1 01 076

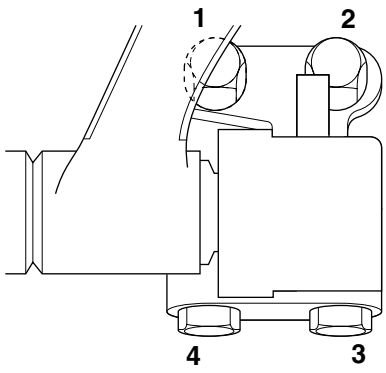
6. Position the stabiliser bearing brackets in relation to the chassis supports.
7. Fit the attachment bolts (2), (3) and (4) on the right-hand side of the vehicle. Tighten the bolts but not yet to the specified torque.
8. Tighten the attachment bolts (3) and (4) to the specified torque. See "Technical data".



K1 01 021

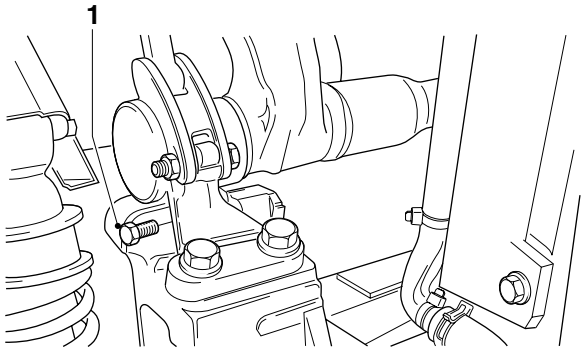
9. Fit the attachment bolts (2), (3) and (4) on the left-hand side of the vehicle but do not yet tighten these bolts to the specified torque. The stabiliser bearing bracket must still be able to move.
10. Position the lift cylinder and fit the bolt. Tighten the bolt to the specified torque. See "Technical data".

    Note:
    Before fitting the prestressed bolt check that the threaded hole in the aluminium chassis bracket has a screw thread.



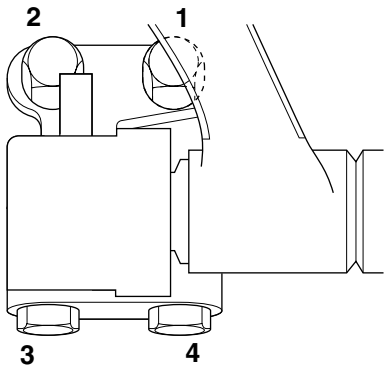
K1 01 022

11. Fit the prestressed bolt (1). Tighten the prestressed bolt to the specified torque. See "Technical data".
12. Lower the cab and remove the hoist yoke.
13. Check whether the gear lever is in neutral.
14. Tilt the cab completely forward.



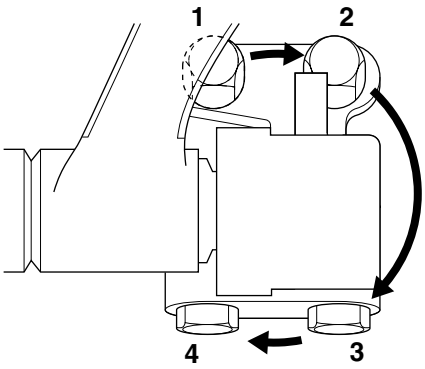
K1 01 066

15. Insert the bolt (1) on the right-hand side of the vehicle and tighten both bolts (1) and (2) on the rear to the specified torque. See "Technical data".



K1 01 021

16. On the left side place the bolt (1). Fit the bolts (1), (2), (3) and (4) of the stabiliser bearing support in the specified order and to the specified torque. See "Technical data".
17. Remove the prestressed bolt.
18. Attach the bracket for the height control valve.



K1 00 941

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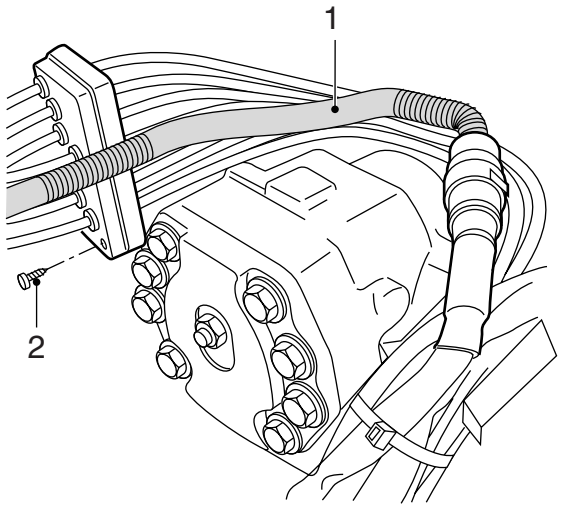
19. Put the coupling block with air pipes in place and secure it using the attachment bolts (2).

20. Connect the connector (1) of the lighting on the left side. Fasten the wiring harness with ties.



K1 01 036

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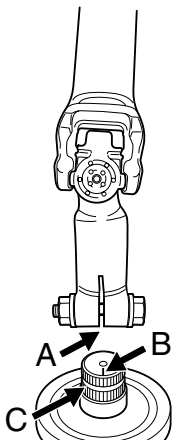
21. Fit the steering-column shaft to the steering-box input shaft. The groove (A) in the coupling must be aligned with the mark (B) on the input shaft of the steering box.

Check that the steering shaft is correctly in place on the input shaft so that the attachment bolt can be put in the notch (C).

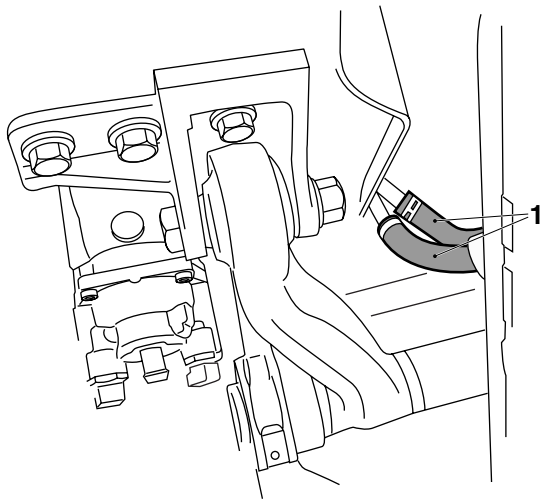
22. Only fit a new attachment bolt and attachment nut to the universal joint. Tighten the attachment bolt to the specified torque. See "Technical data".



K1 01 353

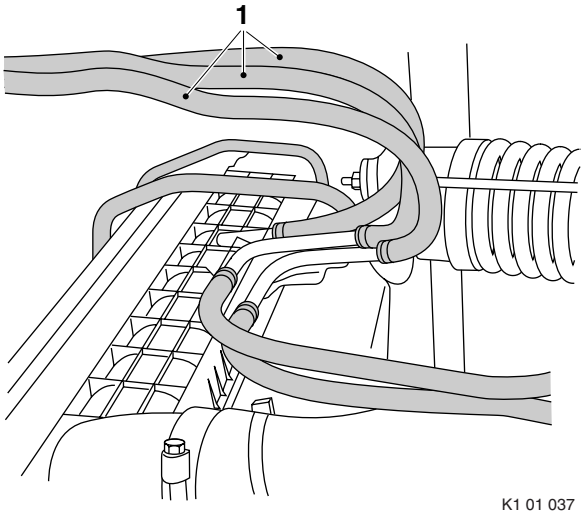
23. Attach the pipe for the clutch cylinder (on chassis side member). Fasten the pipe with the special clips for that purpose.

24. Attach the heater hoses (1) to the underside of the cab and attach the heater hose to the front of the cab.



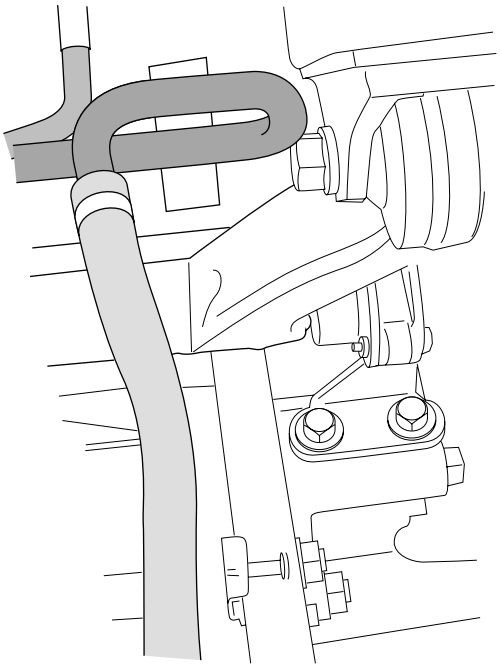
K1 01 067

25. Attach the coolant hoses (1) from the engine to the expansion reservoir.

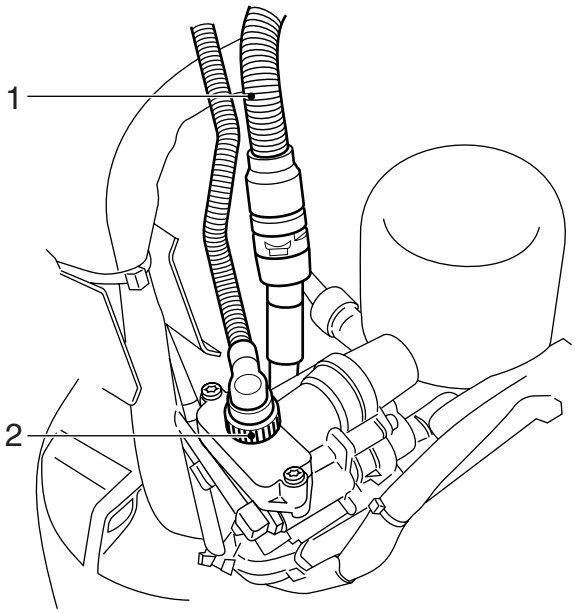


K1 01 037

26. Attach the coolant hose from the expansion reservoir to the engine.

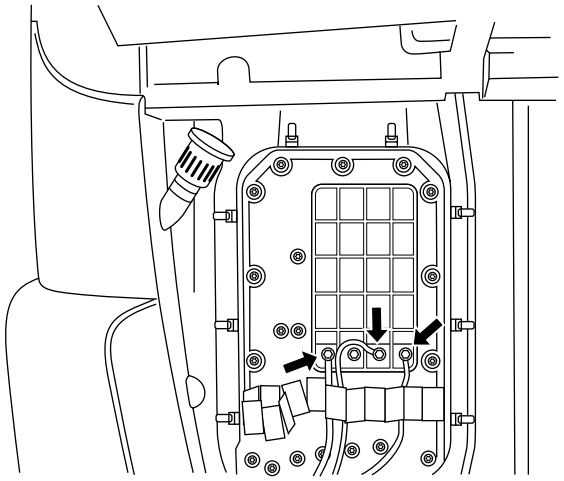

K1 01 039

27. Connect the connector (1) of the lighting on the right-hand side.
28. Install the connector (2) on the air supply unit.
29. If present, attach the fuel pipe to the cab heater.
30. Connect the pipe to the clutch cylinder. Fix the pipe securely with a clamp to prevent the pipe from chafing.
31. Install the air conditioning pipes and secure them using the attachment nuts.
32. Fit the lower cover of the cab lead through.



K1 01 032

33. Fit the connectors and the cables in the cab lead through. Seal the tachograph.
34. Fit the cover of the cab lead through.
35. Fit the vehicle grille.
36. Fit the corner pieces.
37. Bleed the clutch cylinder.
38. Connect the air pipe to the splitter control valve.
39. Fill the cooling system.
40. Fit the earth lead to the battery terminal.
41. Let the engine idle and top up the cooling system, if necessary.
42. If applicable, fill the air conditioning system.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1. SAFETY INSTRUCTIONS

1.1 SAFETY INSTRUCTIONS

General
The cab is equipped with a hydraulic tilting mechanism. The pump is located on co-driver's side at the rear of the cab. The cab locks are opened hydraulically during pumping.

Before tilting the cab, make sure that the doors are closed, that there are no loose items in the cab and that the gear lever is in neutral.
Always tilt the cab **fully** forward if work must be carried out underneath the cab.

You can stop the cab tilting forward at any time by turning the cock of the cab tilting pump to the reverse tilting position.

When working on a tilted cab (for example when welding, spray-painting or applying bitumen coatings), be sure to cover the piston rod of the lifting cylinder. Welding spatter and paint on the piston rod will inevitably cause damage to the oil seal.

Inspection after a collision
Before tilting the cab after a collision, check the cab rests, the cab hinges and the attachment of the lifting cylinder to the chassis member and cab for cracks.

If the vehicle has been involved in a collision, the cab must under no circumstances be tilted without due precautions. The end stop in the lifting cylinder may be damaged, which might cause the cab to shoot past its end stop.

If possible, suspend the cab from a hoist and place a stand in front of the cab. Also make sure that there is no one in front of the cab while it is being tilted.

Replacing lifting cylinder:
After a collision, **always** check the lifting cylinder for internal damage.
Replace the lifting cylinder if damaged or if in doubt.
Always replace the lifting cylinder if one of the following points has occurred during a collision:

- The cab has been pulled out of the cab locks
- The cab locks have been deformed or damaged
- The rear springs have been deformed or damaged.

2. GENERAL

2.1 OPERATION, TILTING MECHANISM

General
The cab is equipped with a hydraulic tilting mechanism. The pump is located on the co-driver's side at the rear of the cab.
The cab locks are automatically hydraulically opened when the pump is being operated.

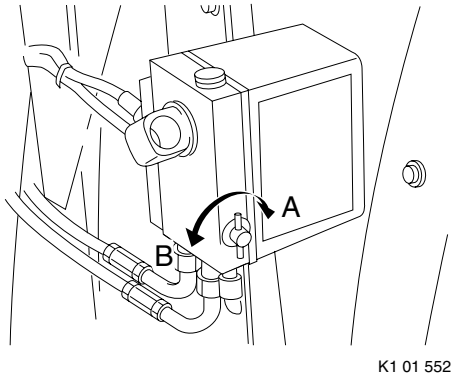
If the vehicle has been involved in a collision, check the following points before tilting the cab:
- Cab rests
- Cab hinges
- Attachment of the lifting cylinder
- Hydraulic system for leakage.

After this check, continue to proceed with utmost care.
If possible, suspend the cab in slings and put a stand in front of the cab.
After a collision, always check the lifting cylinder for internal damage.

Tilting the cab
- Make sure there are no people immediately in front of the cab.
- Make sure there is sufficient clearance around the cab.
- Make sure there are no loose objects inside the cab.
- Apply the parking brake.
- Move the gear lever to the correct position and turn the engine off.
- Close the doors.

Tilting the cab forward
- Turn the two-way valve of the cab tilting pump fully clockwise (A).
- Position the pump actuating rod in the pump and operate the pump.
- You can stop the cab tilting forward at any time by turning the two-way valve counterclockwise.

Tilting back
- Turn the two-way valve of the cab tilting pump fully counterclockwise (B).
- Position the pump actuating rod in the pump and operate the pump.
  You can stop the cab tilting back at any time by turning the two-way valve clockwise (A).
- When the cab has been fully tilted back, the warning symbol "cab lock open" on the master display should be extinguished.



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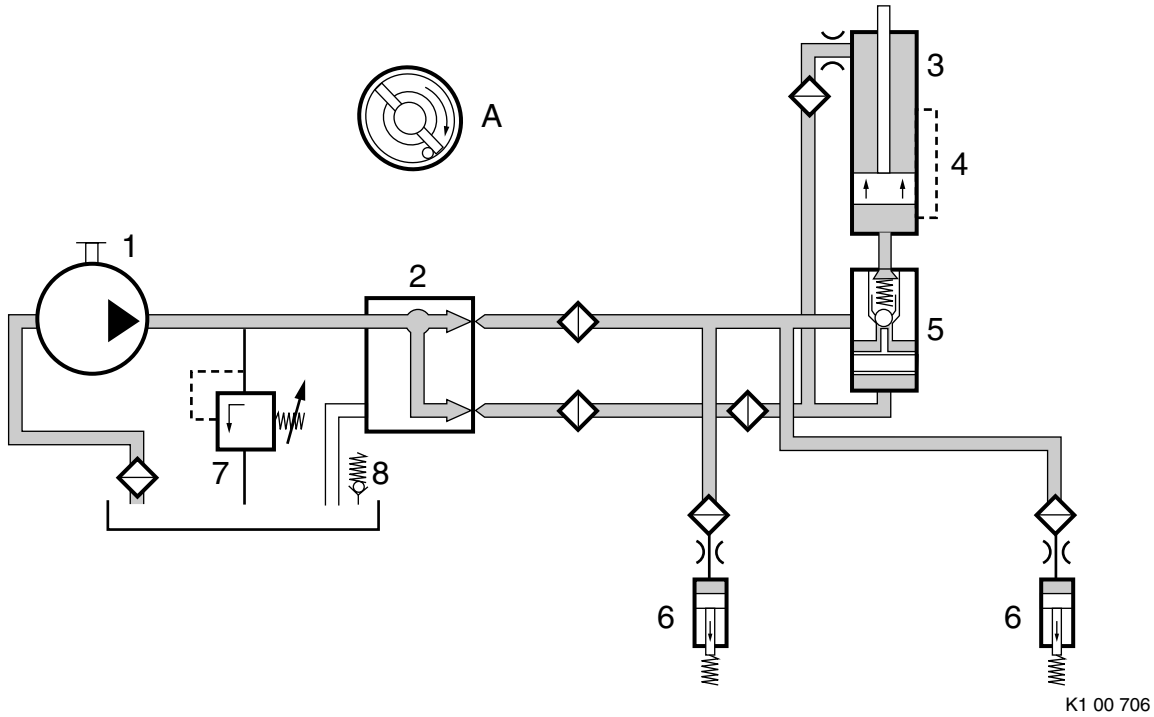
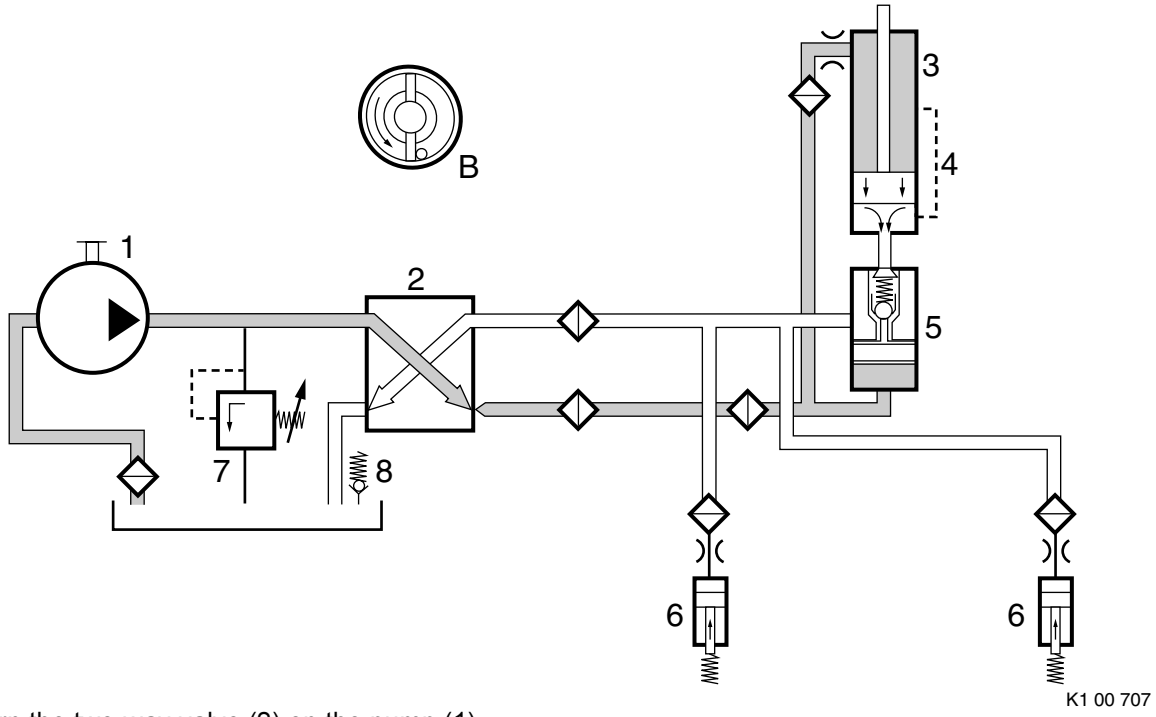
Tilting the cab forward



Turn the two-way valve (2) on the pump (1) clockwise (position A).
While pumping, pressure will build up in both pipes leading to the lifting cylinder (3) and the cab locks (6).
Any overpressure in the system is returned to the reservoir via the safety valve (7).
At each pump stroke, the non-return valve (5) opens.
Oil will now flow underneath the piston of the lifting cylinder (3).
The pressure in the pipes drops back to zero at the end of each pump stroke.
As a result, the non-return valve (5) closes.

In spite of the fact that the oil pressure above and below the cylinder piston is the same, the cylinder is pumped out, so that the cab is tilted.
This is due to the fact that the same pressure is acting on two surfaces that are different in area.
The resulting force is the pressure in the system which is applied to the surface of the plunger cross section.
Once it has passed top dead centre, the cab will fall into the full tilt position on its own.
Pumping is not necessary during this time.

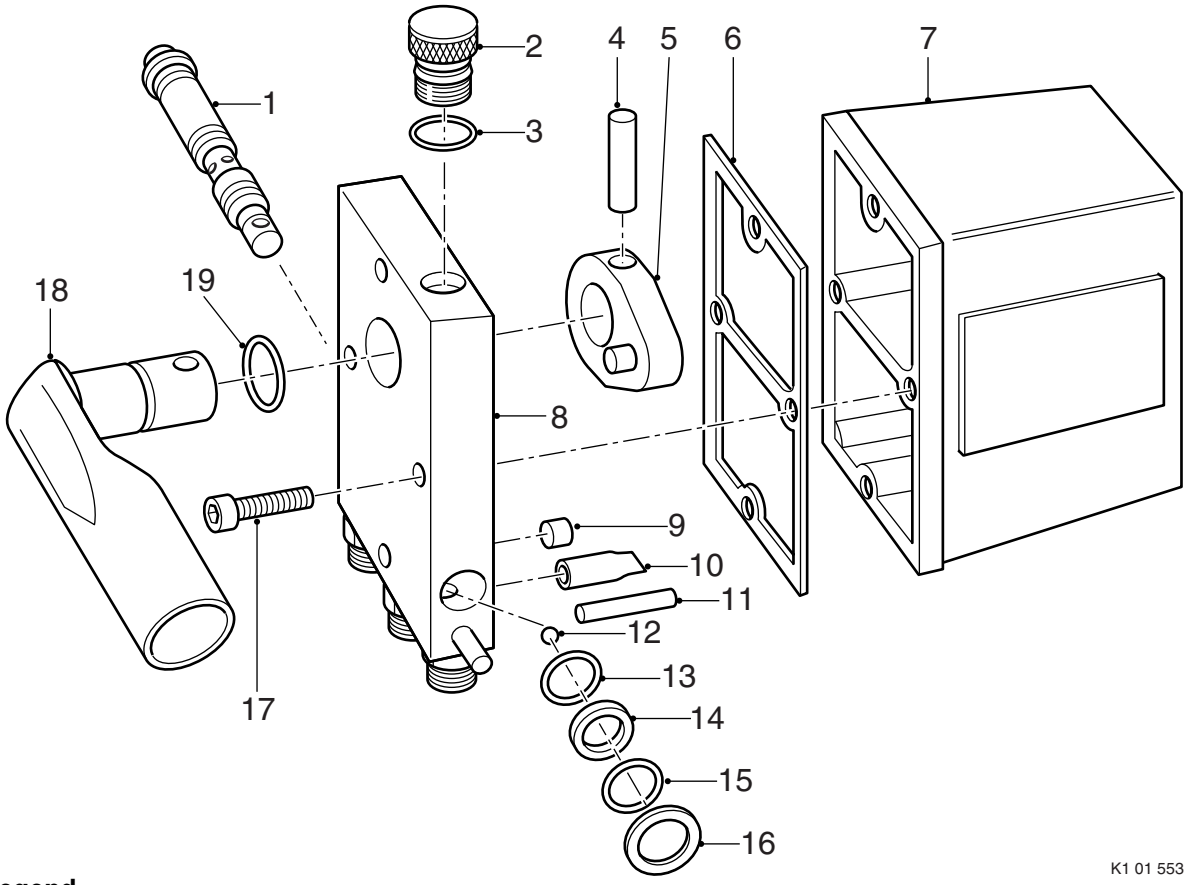
Tilting the cab back



Turn the two-way valve (2) on the pump (1) counterclockwise (position B).
While pumping, the pressure which has built up in the pump will be passed on to the pressure side of the cylinder (3) and the non-return valve (5) in the cylinder (3) will be activated simultaneously.
Each stroke of the pump (1) opens the non-return valve (5).
When the non-return valve (5) in the cylinder opens, oil can flow back into the pump reservoir from the cylinder return side.
The cab will move only when the pump is being operated.
The pressure in the pump and the pipes consequently drops back to zero at the end of each pump stroke. The non-return valve (5) will now close.
The cab will fall downwards on its own a few centimetres before it is completely secured in the locks.
This is due to the fact that the piston of the cylinder is in a position which allows a leak-off connection (4) between the areas above and below the cylinder piston.
The warning symbol "cab lock open" on the instrument panel goes out as soon as the cab locks are engaged.

2.2 OVERVIEW DRAWING, CAB TILTING PUMP

Note:
This drawing gives a general view and may differ from the actual situation.



Legend

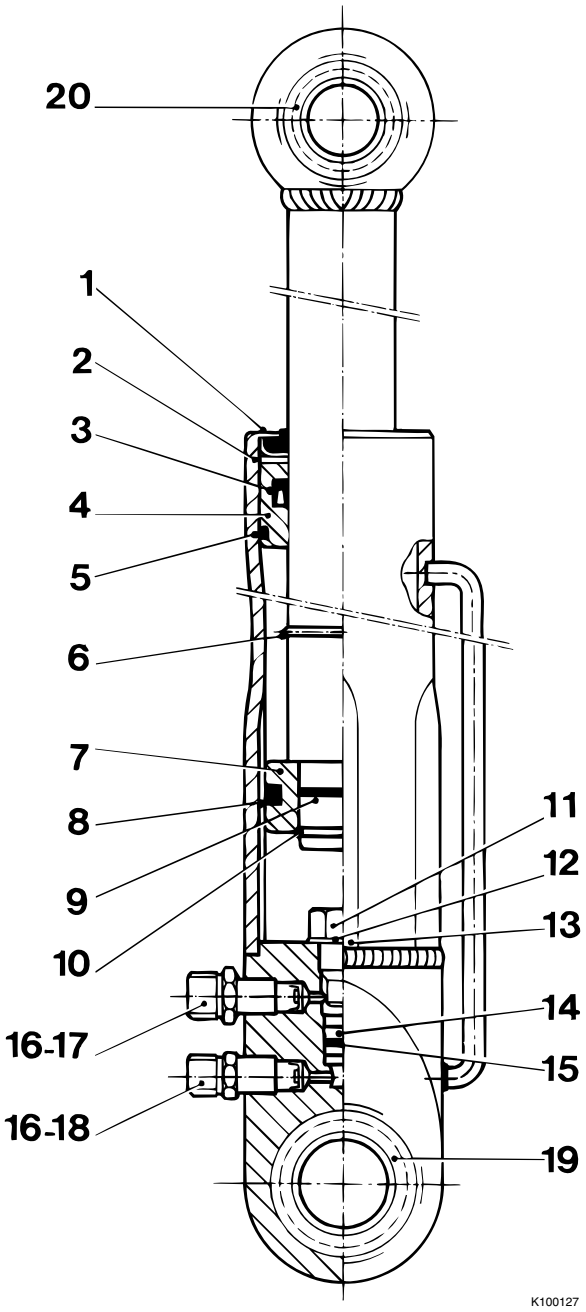
1. Two-way valve
2. Filler plug
3. O-ring
4. Pin
5. Holder
6. Gasket
7. Reservoir
8. Pump housing
9. Magnet
10. Filter
11. Notched pin
12. Inlet ball
13. O-ring
14. Teflon ring
15. O-ring
16. Ring
17. Torx bolt
18. Lever
19. O-ring

2.3 OVERVIEW DRAWING, LIFTING CYLINDER

Note:
This drawing gives a general view and may differ from the actual situation.

Legend

1. Dirt scraper
2. Circlip
3. U-cup
4. Upper bearing
5. O-ring
6. Circlip/stop collar
7. Piston
8. O-ring
9. O-ring
10. Circlip
11. Non-return valve seat
12. Ring
13. O-ring
14. Non-return valve
15. O-ring
16. Seal
17. Clutch
18. Clutch
19. Plastic ring
20. Plastic ring



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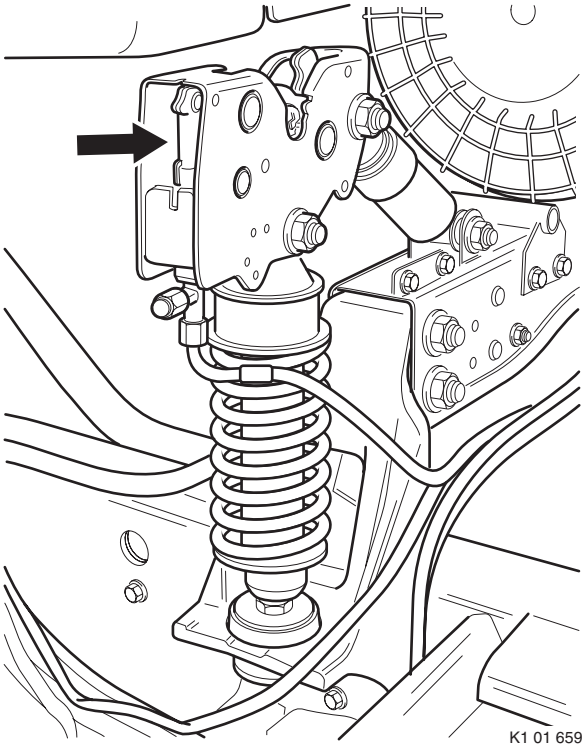
3. INSPECTION AND ADJUSTMENT

3.1 INSPECTING TILTING MECHANISM

1. Check all pipes and connections for any leakage.
2. Check the cab tilting pump for leaks.
3. Check the lifting cylinder and the cab locks for leaks.
4. Check that the pistons of the cab locks can move in and out freely.

Note:
A defective cab tilting mechanism is often the result of contaminated oil.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3.2 INSPECTION AND ADJUSTMENT, PRESSURE LIMITING VALVE OF CAB TILTING PUMP

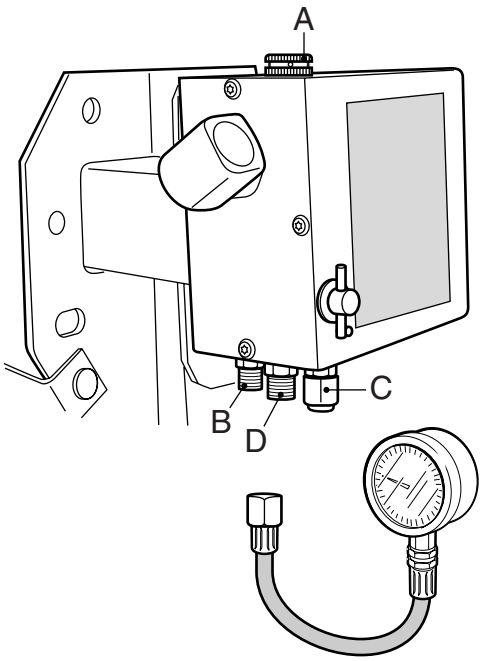
Always use a pressure gauge for inspection and adjustment of the pressure limiting valve. Too high a pressure may damage the tilting mechanism and give rise to extremely dangerous situations.

Checking pressure limiting valve of cab tilting pump

1. Remove the pipes from the pump and plug the connection (D) on the pump with a dummy nipple.
2. Connect a pressure gauge with a range of no less than 600 bar to connection (B).
3. Bleed the pressure gauge hose.
4. Check the oil level in the pump.

   Note:
   Check the oil level. Never fill the oil reservoir when the cab is tilted.
5. Put the two-way valve of the cab tilting pump in the "tilt forward" position. Operate the pump. If the measured pressure does not match the specified pressure, see "Technical data", the pressure limiting valve must be adjusted.

   Note:
   The pressure will fall slowly the moment pumping is stopped; this is normal. A fast pressure drop would indicate a defective two-way valve.
6. Remove the pressure gauge and dummy nipples and connect the pipes.
7. Check the oil level in the pump.



K1 01 640

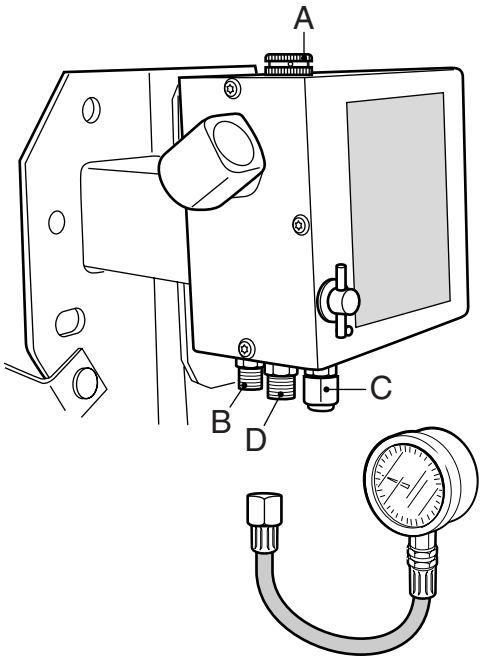
Too high a pressure may cause the end stop to be pushed out of the lifting cylinder, causing the cab to tilt forward off the chassis.

Note:
The pressure relief valve is located in the plunger of the cab tilting pump and can be adjusted via the filler opening (A).

Adjusting pressure limiting valve of cab tilting pump

1. Plug connection (D) on the pump with a dummy nipple.
2. Connect a pressure gauge with a range of no less than 600 bar to connection (B).
3. Remove filler plug (A) and fill the reservoir with the specified hydraulic fluid, see "Fluids and lubricants" specification.

   Note:
   Never fill the reservoir when the cab is tilted.
4. Bleed the pressure gauge hose. Put the lifting cylinder cock into the "tilt forward" position. Operate the pump. If the pressure is less than the specified pressure (bar), the pressure relief valve should be adjusted. (Remember that the pressure will drop somewhat as soon as you stop pumping.)
5. Remove filler plug (A) and use a suitable screwdriver to set the pressure relief valve in the plunger to the specified pressure see "Technical data".
6. Remove the pressure gauge and dummy nipple. Connect the pipes.
7. Check the oil level in the pump.



K1 01 640

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4. REMOVAL AND INSTALLATION

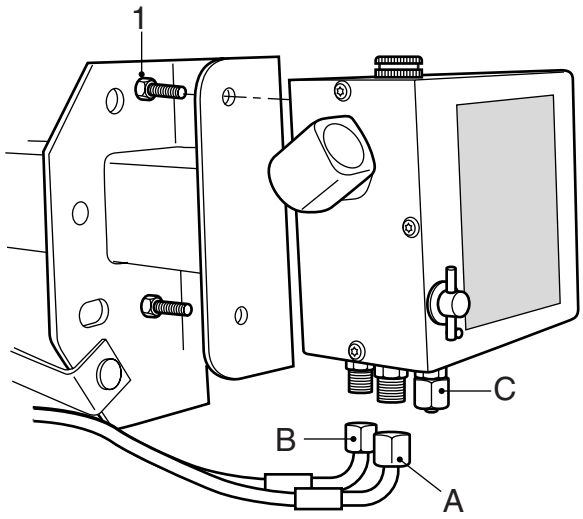
4.1 REMOVAL AND INSTALLATION, CAB TILTING PUMP

Removing cab tilting pump

1. Disconnect the pipes and collect the oil in a container.

2. Remove the attachment bolts (1) and remove the pump. Collect any remaining oil from the pump in a container.

3. Thoroughly clean the threaded holes if the nipples have been or will be removed from the pump housing, and make sure that any Teflon tape is removed.



K1 01 641

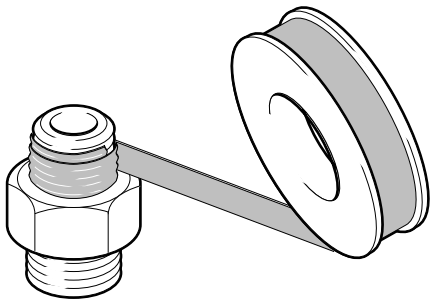
Installing cab tilting pump

1. Install the pump with the attachment bolts (1).

2. Connect the pipes.
   A = pressure pipe (thick pipe, M14)
   B = return pipe (thin pipe, M12)
   C = not used

Note:
Use Teflon tape to install the nipples in the pump housing. Note: Do **not** apply Teflon tape to the first turn of the nipples. This will prevent the system from being soiled with Teflon tape.

3. For filling and bleeding the system, see chapter "Draining and filling".


K1 01 502

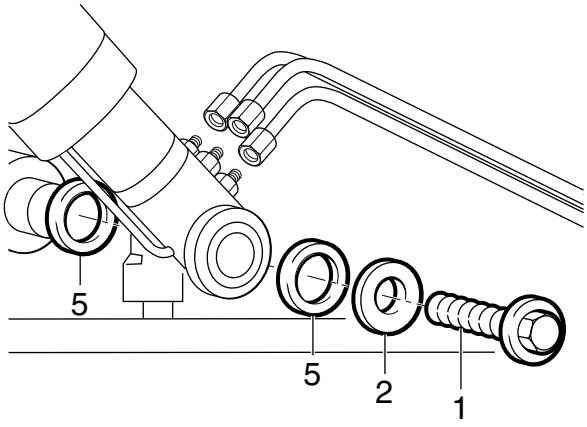
4.2 REMOVAL AND INSTALLATION, LIFTING CYLINDER

Do not remove the lifting cylinder while the cab is in the tilted position.

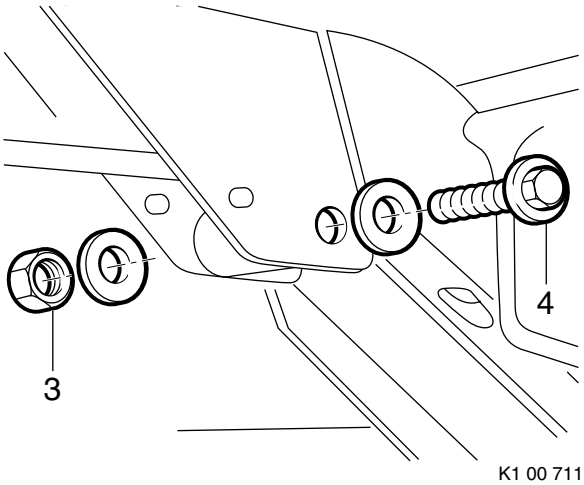
Note:
Mark the piping before removing it.

Removing lifting cylinder

1. If necessary, remove the cable gutter.
2. Disconnect the pipes from the lifting cylinder and collect the oil in a container. Plug off the pipes and connections.
3. Remove the compressor pipe.
4. Remove the attachment bolt (1) and washer (2) and take the lifting cylinder from the axle journal.
5. Remove the attachment nut (3) and attachment bolt (4), which attach the lifting cylinder to the cab.
6. Remove the lifting cylinder and remove the plastic rings (5).



K1 00 710

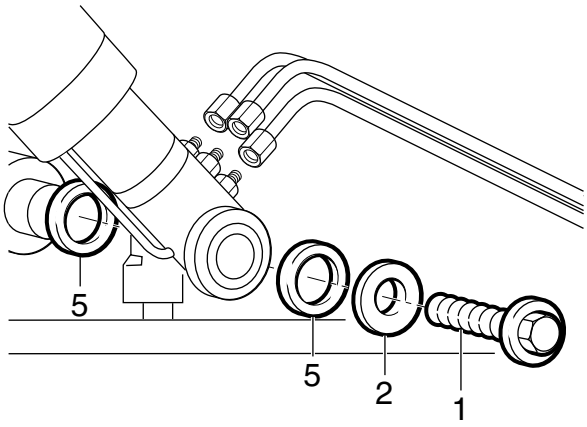


K1 00 711

Installing lifting cylinder

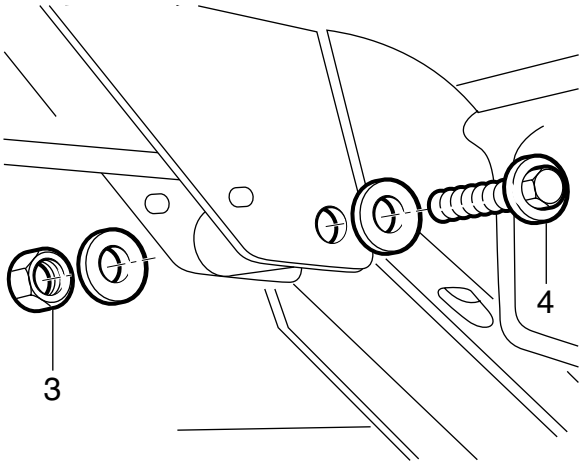
1. Fit the plastic rings (5) on both sides of the lifting cylinder, with the flat sides in the recesses.

2. Fit the lifting cylinder to the axle journal and fit the washer (2) and attachment bolt (1).



K1 00 710

3. Use the attachment bolt (4) and attachment nut (3) to attach the lifting cylinder to the cab. Do not yet tighten the attachment bolt (4) to the specified tightening torque, see "Technical data".



K1 00 711

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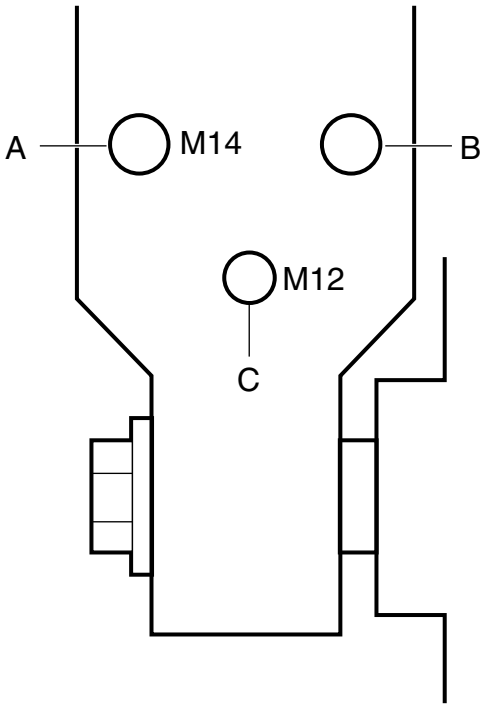
4. Connect the pipes to the lifting cylinder.
   A= pressure pipe
   B = cab locks
   C = return pipe

   Note:
   Use Teflon tape to install the nipples in the pump housing. Note: Do **not** apply Teflon tape to the first turn of the nipples. This will prevent the system from being soiled with Teflon tape.

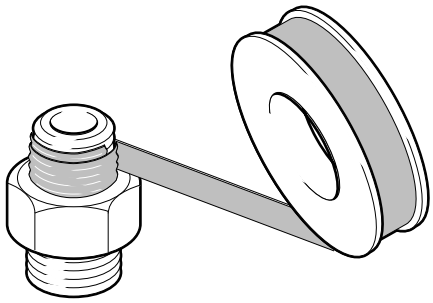
5. Tilt the cab forwards.

6. Fit the compressor pipe.

7. If necessary, install the cable gutter.

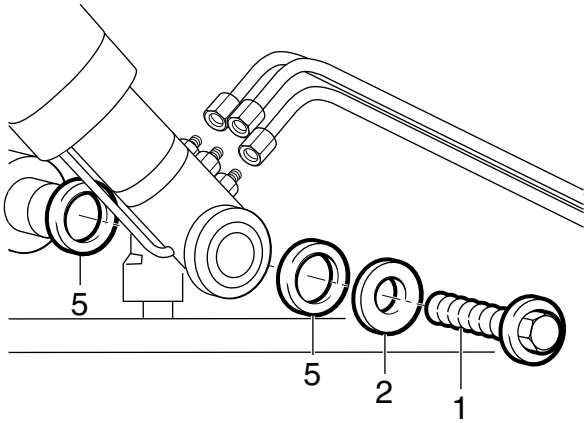


K1 00 712



K1 01 502

8. Secure the attachment bolt (1).



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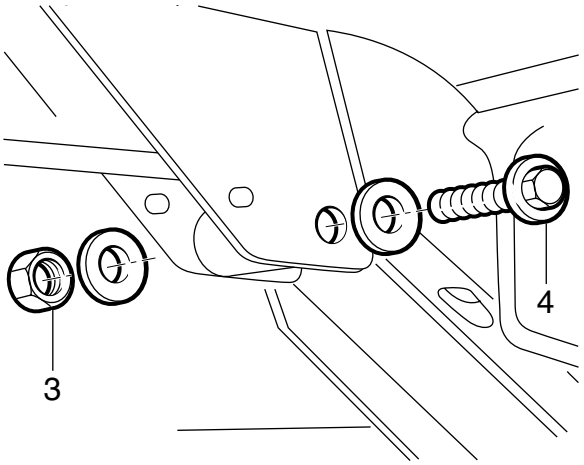
9. Tighten the attachment bolt (4) to the specified torque. See "Technical data".
10. Tilt the cab back.
11. For filling and bleeding the system, see chapter "Draining and filling".



K1 00 711

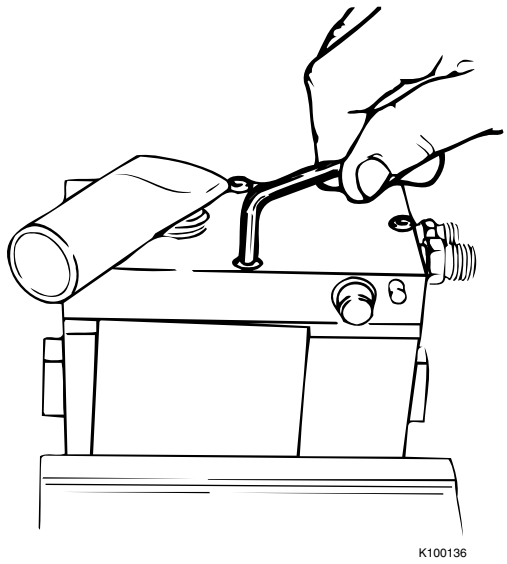
4.3 REMOVAL AND INSTALLATION, CAB TILTING PUMP SEALS

Note:
- Use a repair kit to replace the seals.
- Disassembling any other parts of the tilting pump than those described in this chapter is **not** permitted. A defective cab tilting mechanism is often the result of incorrect disassembly and/or assembly of the cab tilting pump.
- Clean the outside of the cab tilting pump.
- Work in a clean environment.

Removing cab tilting pump seals

1. Remove the cab tilting pump.

2. Loosen the 4 Torx screws used to attach the reservoir to the pump housing. Collect the oil in a container.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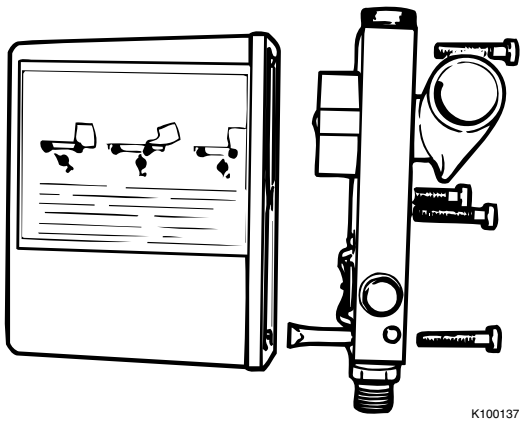
3. Remove the pump housing from the reservoir and remove the gasket.

4. Remove the filter and the magnet from the pump housing.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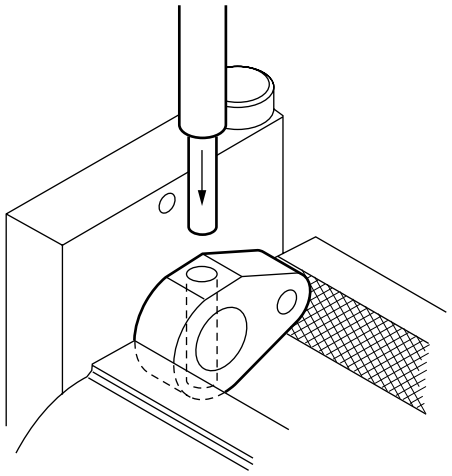
5. Secure the pump housing in a vice according to the adjacent figure and tap the pin out of the holder and the lever axle.



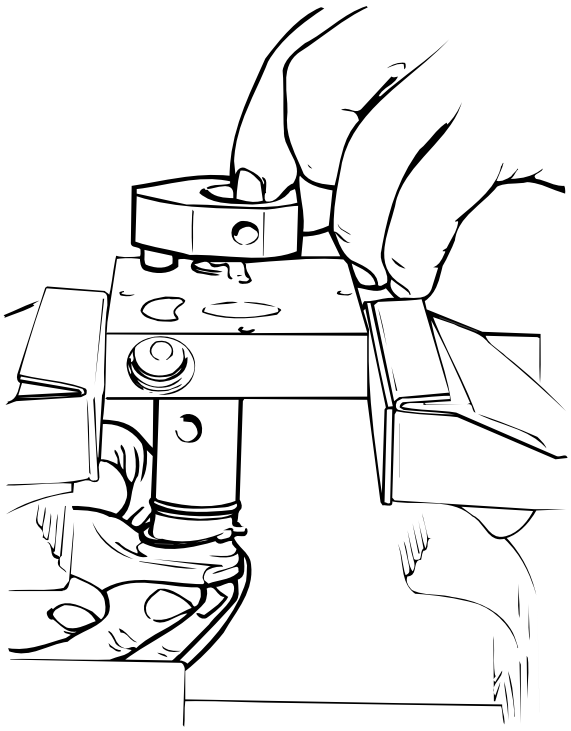
K1 01 499

6. Remove the holder and the lever axle. Remove the O-ring from the lever axle.

7. Clean the reservoir, the filter, the magnet and the contact surfaces of the gasket.

Installing cab tilting pump seals

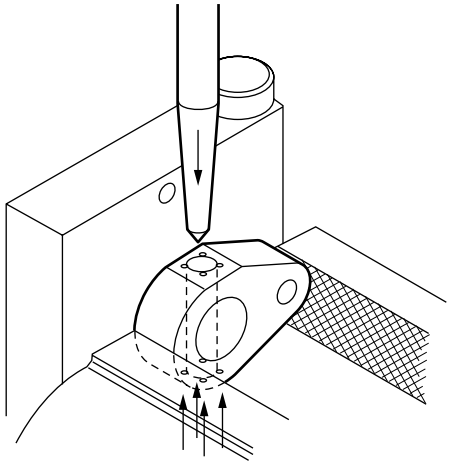
1. Fit a new O-ring to the lever axle.



K100139

2. Fit the holder to the lever axle. Tap the pin into its holder and the lever axle. Secure the pin as shown in the adjacent figure.

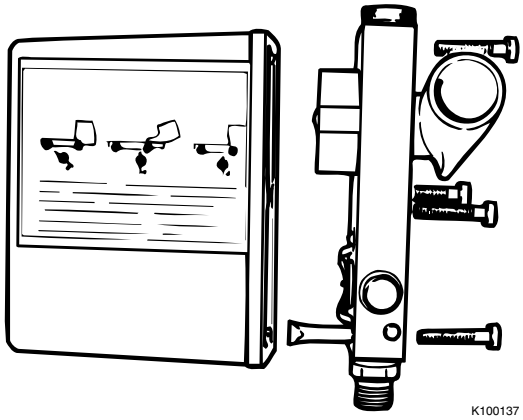
3. Fit the filter and the magnet to the pump housing.



K1 01 498

4. Fit the reservoir with a new gasket onto the pump housing using the 4 Torx bolts.

5. Install the cab tilting pump.



K100137

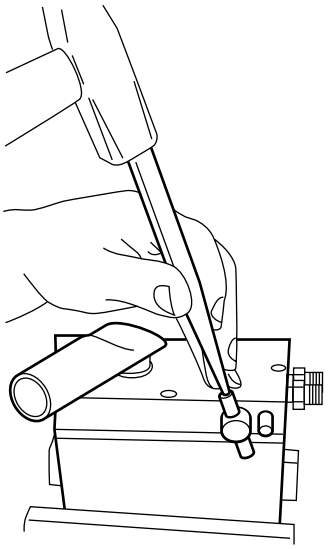
4.4 REMOVAL AND INSTALLATION, CAB TILTING PUMP TWO-WAY VALVE

Note:
- Use a repair kit to replace the two-way valve.
- Disassembling any other parts of the tilting pump than those described in this chapter is **not** permitted. A defective cab tilting mechanism is often the result of incorrect disassembly and/or assembly of the cab tilting pump.
- Clean the outside of the cab tilting pump.
- Work in a clean environment.

Removing cab tilting pump two-way valve

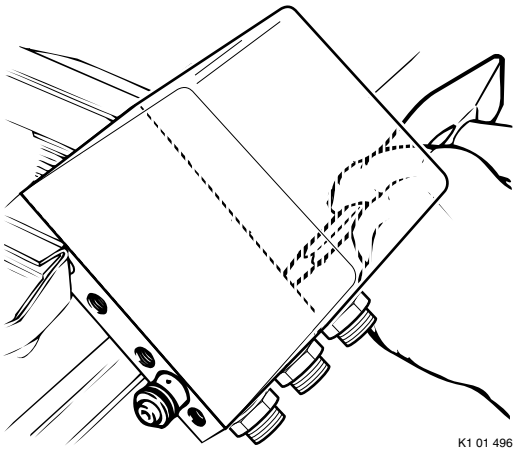
1. Remove the cab tilting pump.

2. Tap the notched pin out of the two-way valve and remove the steel ring. Remove the O-ring from the steel ring.



K1 01 340

3. Secure the pump housing in a vice as shown in the adjacent figure and carefully tap the two-way valve with the sealing plug out of the housing. **Note:** Mark the position of the two-way valve in the pump housing so that the new two-way valve can be mounted in the right position.



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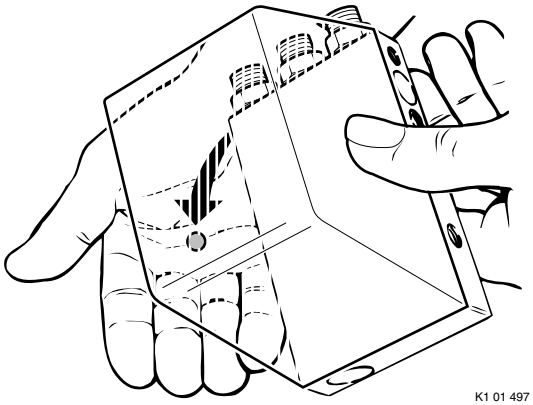
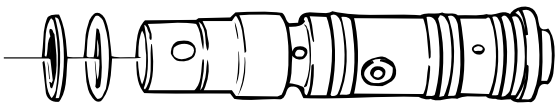
4. Take the pump housing from the vice and remove the inlet ball.


K1 01 497

5. Remove the O-ring and the Teflon ring from the pump housing.

Installing cab tilting pump two-way valve

Note:
- When the two-way valve is installed, observe the correct position of the openings in relation to the connections.
- After assembly of the two-way valve, the pressure limiting valve must be checked/ adjusted. See "Inspection and adjustment".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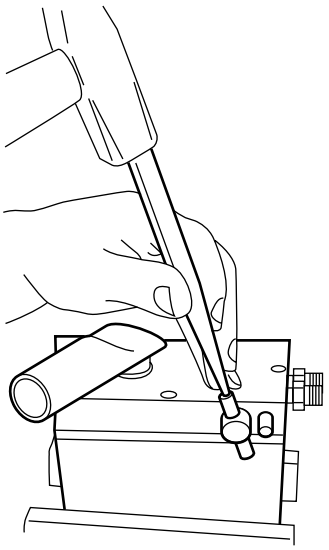
1. Fit the new inlet ball into the pump housing.

2. Apply a little oil to the O-rings of the new two-way valve only.

3. Fit the two-way valve and the sealing plug in the housing. **Note:** Make sure the openings in the two-way valve and the connections in the pump housing are well positioned.

4. Fit the new O-ring and the Teflon ring in the pump housing.

5. Fit the new O-ring in the steel ring. Fit the steel ring onto the two-way valve and tap the new notched pin into the two-way valve.



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5. DISASSEMBLY AND ASSEMBLY

5.1 DISASSEMBLY AND ASSEMBLY, LIFTING CYLINDER

A defective lifting cylinder is often caused by leaking oil sealing rings or a damaged piston rod. To be able to repair the lifting cylinder, the entire piston rod must be removed and the oil seals must be replaced. The cab tilting pump is required to take out the piston rod.

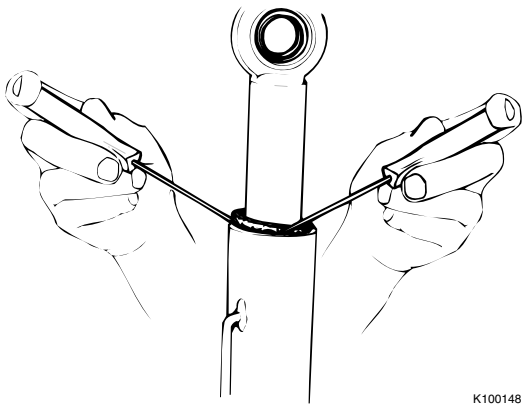
Reconditioning of a lifting cylinder requires not only the use of the reconditioning kit, but also the reuse of a number of components.

Use a separate cab tilting pump to pump the piston in and out.

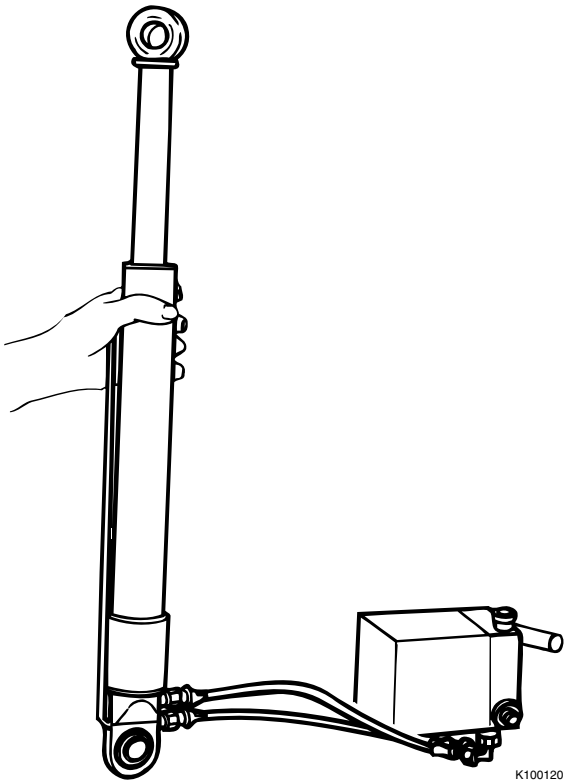
Disassembling lifting cylinder

1. Remove the dust cap.

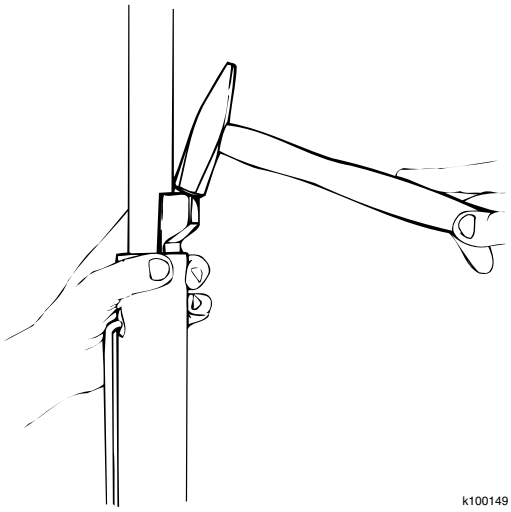
2. Take the dirt scraper out of the lifting cylinder.



3. Connect the lifting cylinder to the pump and pump the piston rod outward to approx. 10 mm from the end.



4. Tap the upper bearing of the piston rod 5 to 10 mm back. Make sure that the piston rod is not damaged in the process.



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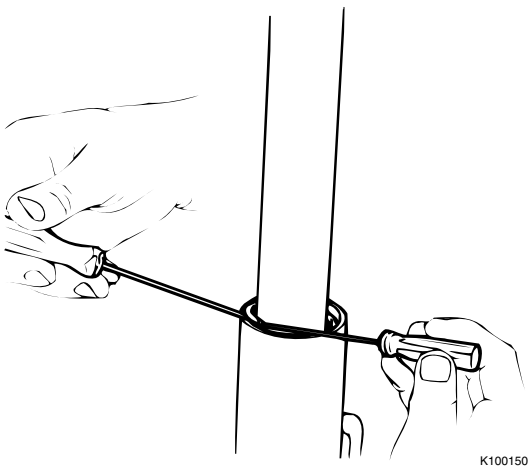
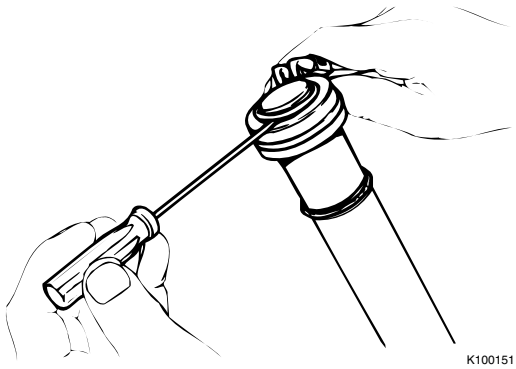
5. Remove the upper circlip from the cylinder and pump the piston rod fully out.



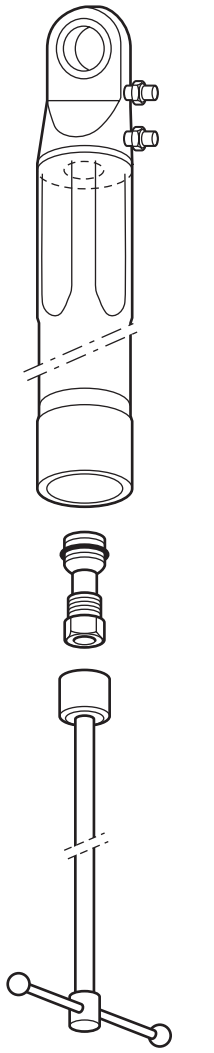
6. Remove the circlip from the piston rod and remove the piston from the rod.



7. Remove the stop ring and the upper bearing.

8. Remove the non-return valve from the cylinder using a 17-mm hexagonal socket. Thoroughly clean all parts.

9. Check the piston rod and the upper part of the cylinder for scratches and damage. If necessary, replace the entire cylinder.



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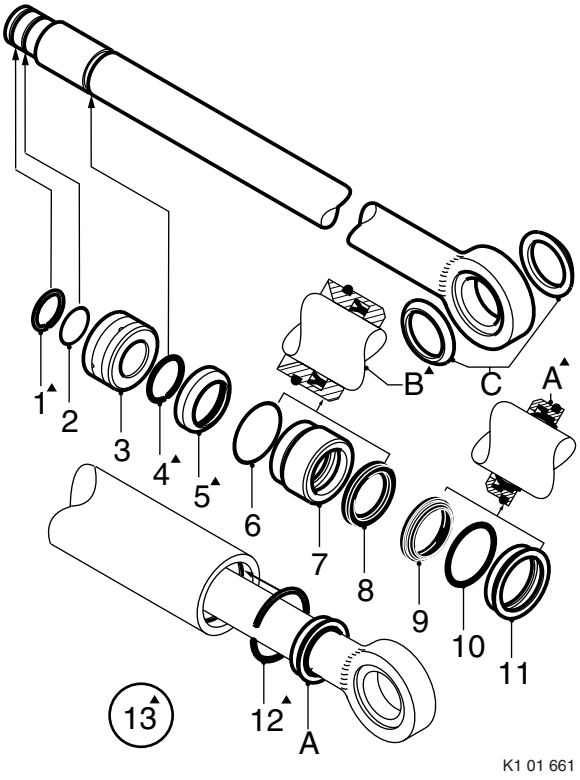
Assembling lifting cylinder

Note:
The components marked in the figure form part of the reconditioning kit (13).



1. Fit the sealing ring (9) in the new dirt scraper housing (11) and fit the "O"-ring (10) into the outer groove, see situation **A.**

2. Fit the sealing ring (8) into the new brass upper bearing (7) and fit the "O"-ring (6) into the outer groove, see situation **B.**

3. Slide the dirt scraper housing (11) over the piston rod.

4. Slide the circlip (12) over the piston rod.

5. Slide the new brass upper bearing (B) over the piston rod, as shown.

6. Slide the stop ring (5) over the piston rod, ensuring that the tapered side fits into the upper bearing.

7. Fit the circlip (4), possibly using an axle spring clip pliers (outer circlip pliers), into the piston rod groove.

8. Slide the existing piston (3) over the piston rod until it touches the stop.

9. Fit the circlip (1) onto the piston rod, using an axle spring clip pliers (outer circlip pliers).

10. Position the cylinder upright in a vice. Press the piston rod into the cylinder. Tap the brass upper bearing approx. 5 mm into the cylinder (past the circlip groove) with a punch.

11. Fit the circlip (12) into the cylinder. Pull the piston out fully to check whether the circlip is properly seated in the groove. This also puts the upper bearing in its final position.

12. Turn the cylinder upside down and press the piston into the cylinder using the cab tilting pump. Add another twenty pump strokes when the piston has been fully pressed into the cylinder to bleed the cylinder.

13. Press the piston out of the cylinder and pressurise the cylinder. Inspect the latter for leakage.

14. Tap the dirt scraper housing (A) evenly into the cylinder using a plastic or copper hammer.

15. Fit the dust cover.

16. Attach the lifting cylinder underneath the cab and check its operation.

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6. DRAINING AND FILLING

6.1 FILLING AND BLEEDING, TILTING MECHANISM

Note:
- Check whether the lifting components have been fitted correctly and whether the connected piping is secure enough.
- Do not add oil to the pump reservoir when the cab is tilted. Add oil to the reservoir only when the cab has been completely tilted back.
- Check the cab tilting pump, the lifting cylinder, pipes and connections for any leakage.

Filling tilting mechanism
1. Clean the area surrounding the filler plug. Remove the filler plug.

2. Put the pump plunger in bottom position by moving the pump actuating rod fully down.

3. Top up the reservoir with the specified oil, see specification manual "Fluids and lubricants", to the top of the pump plunger.

Note:
The cab must be tilted completely back into place.

Bleeding tilting mechanism
1. Place a tray beneath the pump to collect the oil.

2. Start with approx. 30 full pump strokes while leaving the cab tilting pump in the reverse tilting position. If necessary, top up the reservoir with oil.

3. Tilt the cab fully forward (cab tilting pump in the tilting position). Continue pumping and keep the system pressurised. Check all the connections for leaks.

4. Tilt the cab back. If necessary, top up the reservoir with oil.

   Note:
   If the lifting cylinder has been overhauled or renewed, the cab must be tilted twice to obtain full bleeding.

5. Fit the filler plug.

Refilling tilting mechanism

1. Carefully loosen the filler plug 3 to 4 turns and wait until the overpressure, if any, has left the reservoir.
2. Remove the filler plug.
3. Turn the cab tilting pump into the tilting position and start pumping until this is clearly getting heavier.
4. Put the pump plunger in bottom position by moving the pump actuating rod fully down.
5. Top up the reservoir with the specified oil, see specification manual "Fluids and lubricants", to the top of the pump plunger.
6. Fit the filler plug and set the cab tilting pump into the reverse tilting position.

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4.13	Removal and installation, seat belt lock	4-11	200346
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4.15	Removal and installation, heating elements	4-13	200346
4.16	Removal and installation, switch valve	4-14	200346
4.17	Removal and installation, height control valve	4-14	200346
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4.19	Removal and installation, entry/exit aid handle	4-16	200346
4.20	Removal and installation, vertical damping adjuster	4-17	200346
4.21	Removal and installation, seat tilting handle	4-18	200346
4.22	Removal and installation, height adjustment handle	4-19	200346
4.23	Removal and installation, fixed seat height adjustment handle	4-20	200346
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4.27	Removal and installation, adjustment cylinder	4-25	200346
4.28	Removal and installation, control unit of the height control valve	4-26	200346
4.29	Removal and installation, vertical damper	4-27	200346
4.30	Removal and installation, Bowden cable for fixed seat gas damper	4-28	200346
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4.32	Removal and installation, seat squab cover	4-29	200346
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1. SAFETY INSTRUCTIONS

1.1 SAFETY INSTRUCTIONS

- Replace the seat belt if the belt is worn or damaged.
- If the seat belts have been highly stressed during a collision, the entire mechanism must be replaced, even if no damage can be observed.
- Always check the seat attachments for any fractures or ruptures after a collision.
- After a collision, always check whether the seat attachment bolts have been subjected to excessive stress. If in doubt, replace them.
- Do not use abrasive cleaning agents to clean the seat belts; these may damage the seat belt material.

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2. GENERAL

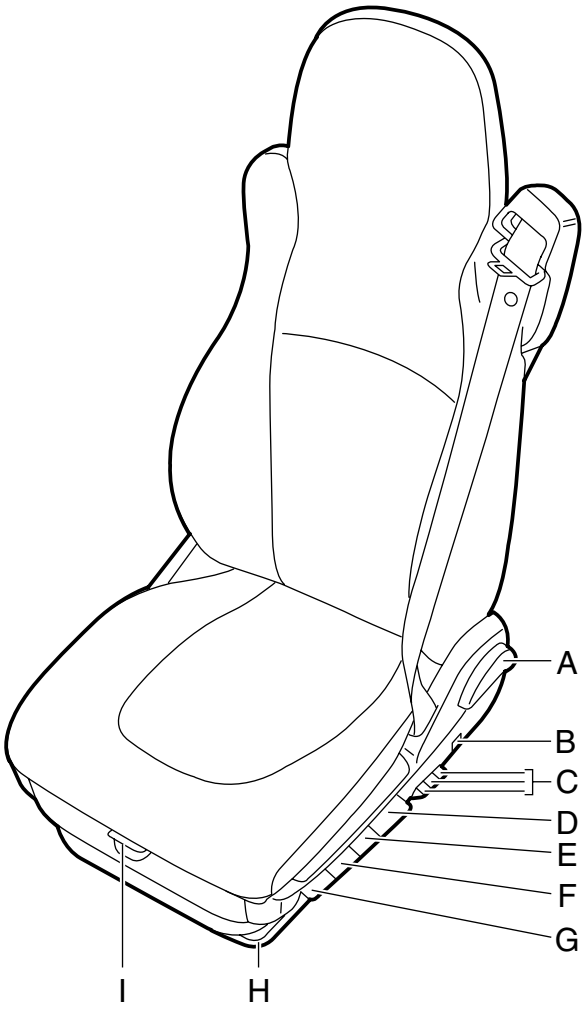
2.1 GENERAL

- Seat repairs must be carried out by trained technicians only.
- The illustrations in this manual usually represent the left-hand seat or the left-hand side. For the right-hand seat or right-hand side, repairs are carried out in a similar way.
- After each repair, a functional test must be carried out; in the case of pneumatic repairs, also carry out an air-tightness test.
- Do not lean on the seat if the back rest has been fully folded forwards.
- The routes of the air pipes and cables must be restored and their connections must be restored to the original positions.
- Also keep to the proper colour position when installing the air pipes.
- Air pipes and cables must not be kinked.
- In the case of transport and storage, ensure that the seat is placed on its longitudinal slides. Air pipes must not be kinked in this case.

2.2 OPERATION

Legend

A. Back rest adjustment handle
B. Switch for seat heating
C. Operating valve for lumbar support
D. Seat height adjustment control
E. Seat angle adjustment control
F. Vertical damping adjustment control
G. Operating valve for entry/exit aid
H. Seat position adjustment bracket
I. Seat squab adjustment handle



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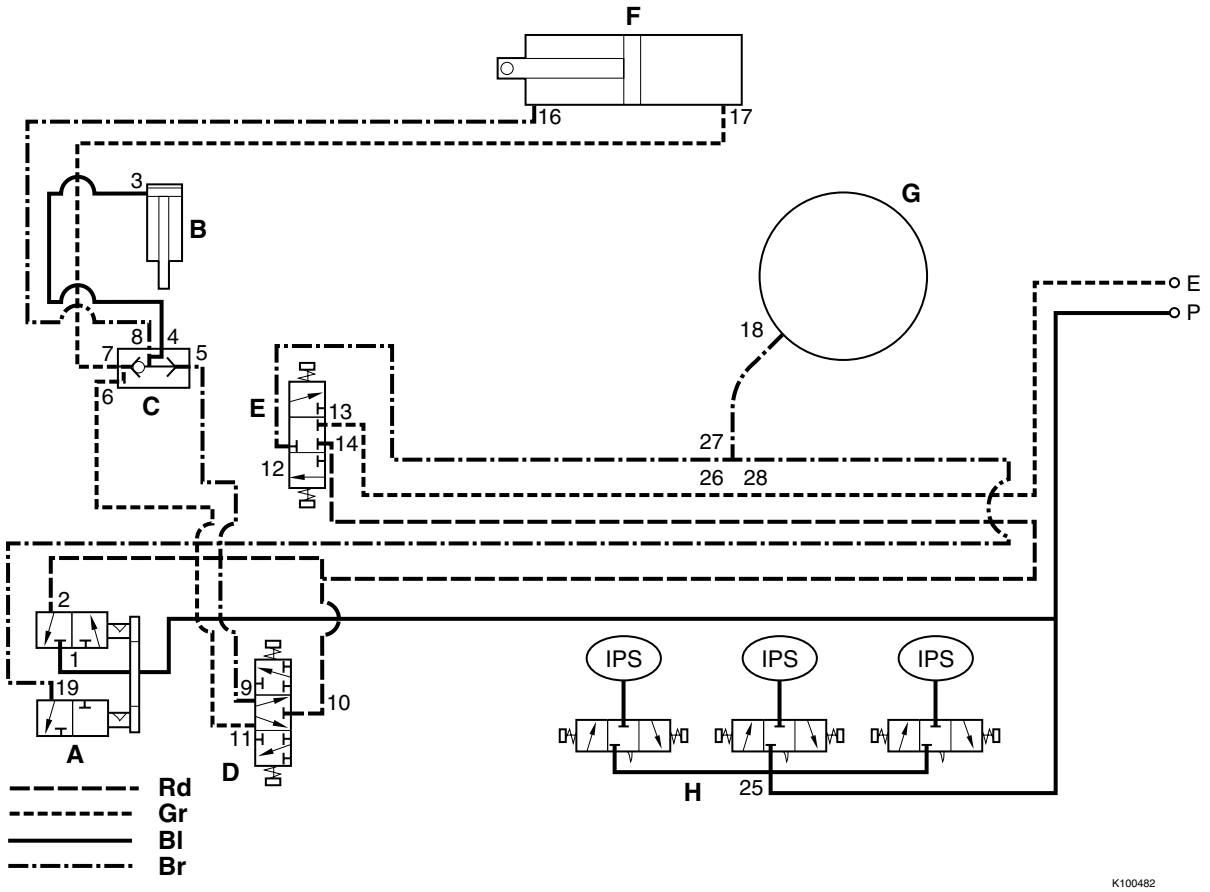
2.3 SERIAL/TYPE PLATE OF SEAT

K100483

The serial number (A) and the DAF part number of the seat are listed on the type plate, located at the front of the seat underneath the dust boot. The DAF part number is also located on the label at the side of the seat.

2.4 SYSTEM DESCRIPTION, AIR-SPRUNG SEAT



Legend

A. Valve for entry/exit aid
B. Control unit of the height control valve
C. Switch valve
D. Height control valve
E. Height control valve
F. Adjustment cylinder
G. Air bellows
H. Valve for pneumatic lumbar support
Rd Red
Gr Grey
Bl Black
Br Brown

Colours and functions of the pneumatic system air pipes
Cab air pressure supply
black cab air pressure supply to
- quick-release air valve A1
- valve H25 for pneumatic lumbar support

Pressure profile when operating entry/exit aid, top button
red from pressure reduction for quick-release valve A2 to
- control valve D10
- height control valve E14

Pressurising/depressurising the air bellows
brown from height control valve E12 to
- air bellows G18

Operation of entry/exit aid, bottom button
borwn from air bellows G18 to
- pressure release valve A19

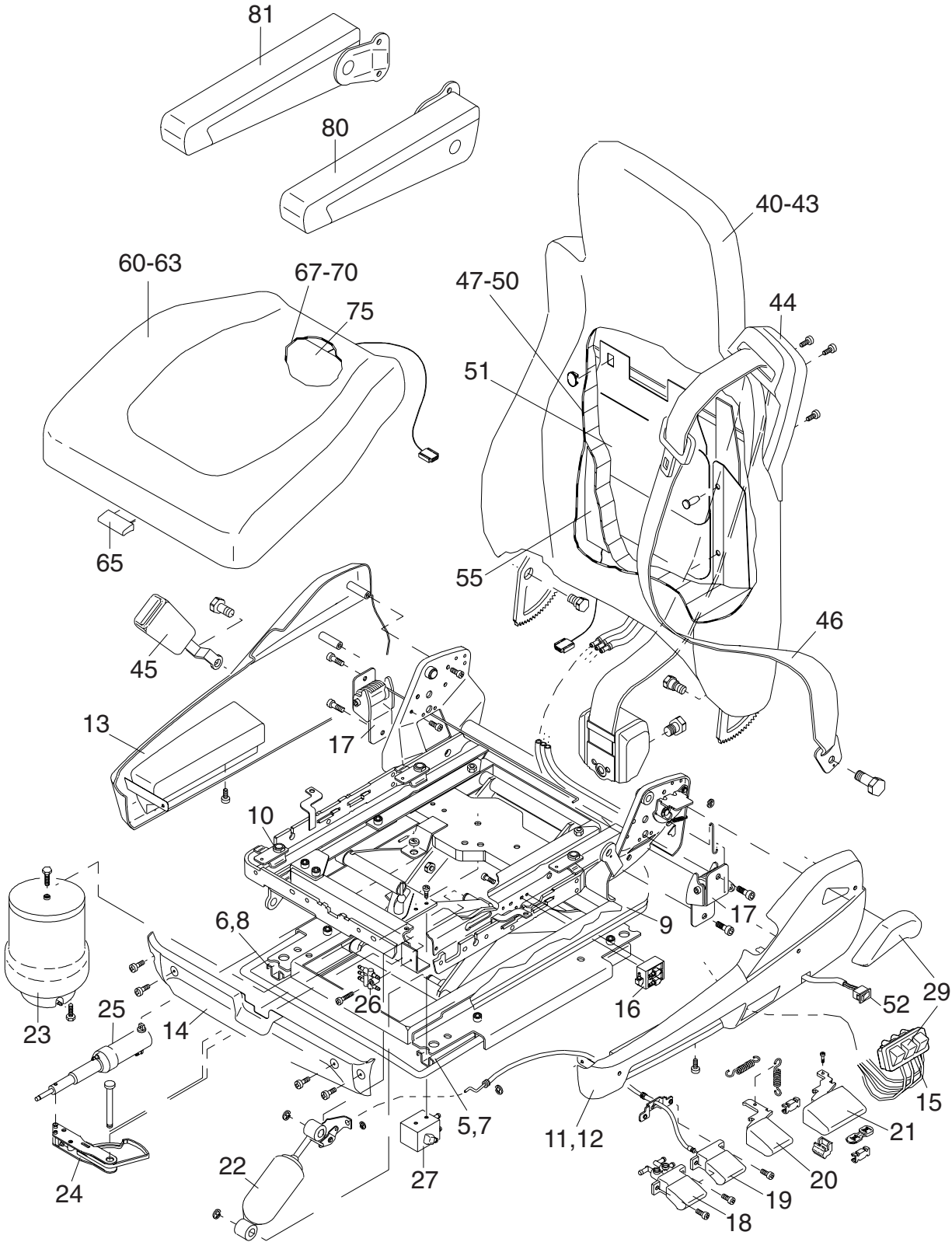
Pressurising the air bellows during use
grey: from height control valve E13 to
- cab

Colours and functions of the height adjustment air pipes
Seat up
brown: from control valve D9 to
- switch valve C5
- switch valve C8
- adjustment cylinder F16

Seat down
grey: from control valve D11 to
- switch valve C6
- switch valve C7
- adjustment cylinder F17

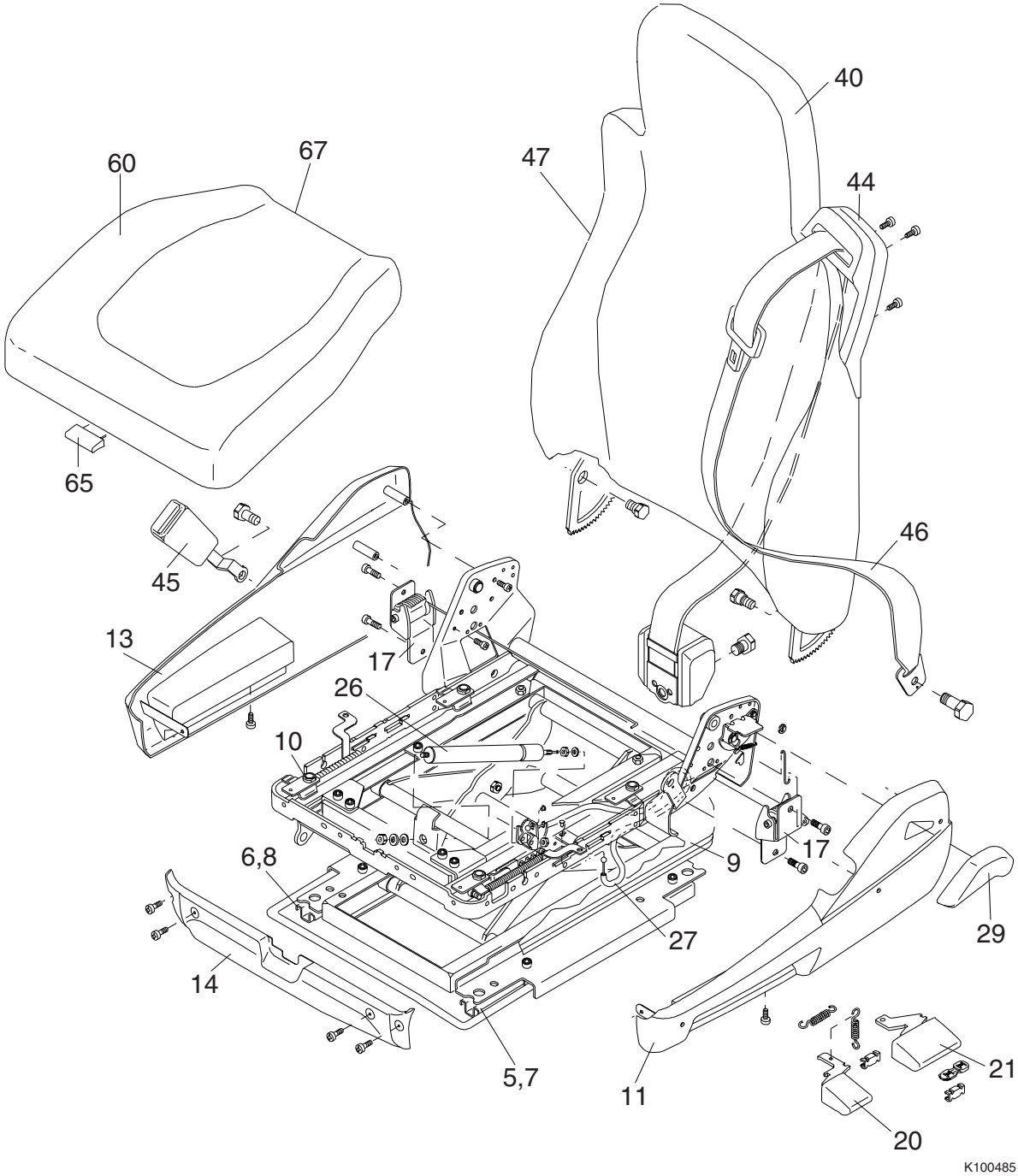
Seat up/down
black: from switch valve C4 to
- locking cylinder B3

2.5 OVERVIEW DRAWING, HIGH LUXURY MODEL ISRI 6800



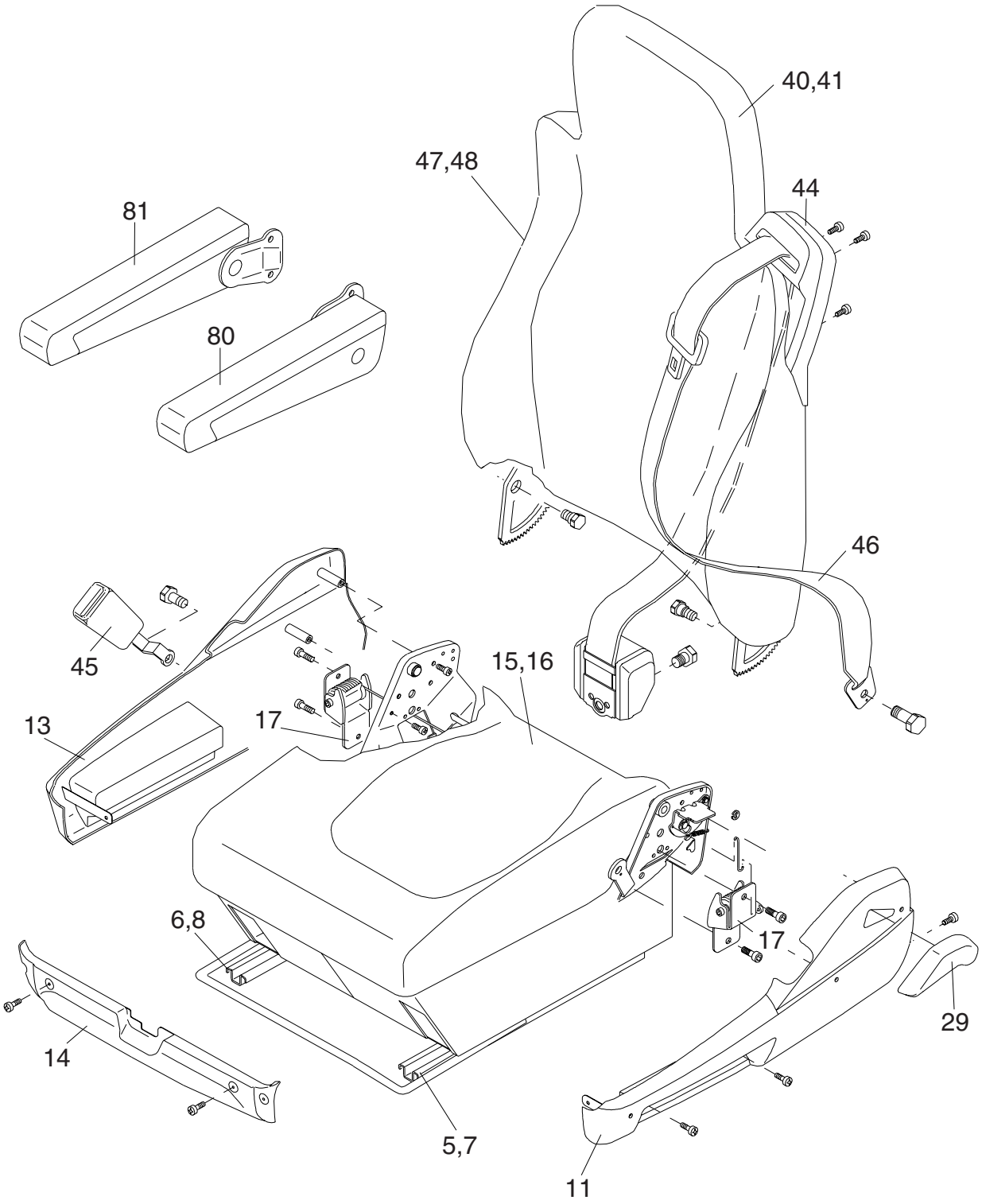
Item	Description	Note
5-8	Seat guides	
9	Rubber dust boot with fastening material	not shown
10	Guide for seat squab adjustment	
11-13	Side cover panel	
14	Front cover panel	
15	Control of pneumatic lumbar support	LWS = 1 or 2 switch buttons, IPS = 3 switch buttons
16	Height control valve	
17	Back rest adjustment mechanism	Y-section (if any), not shown
18	Control of entry/exit aid	
20	Seat angle control knob	
21	Seat height control knob	
22	Vertical damper	
23	Pneumatic spring	
24	Control unit of the height control valve	
25	Adjustment cylinder	
26	Switch valve	
27	Height control valve	
28	Connections/air pipes	not shown
29	Back rest control knob	
40-43	Back rest	
44	Seat belt cover	
45	Seat belt lock without contact switch	
46	3-point seat belt	
47-50	Back rest cover	
51	Air reservoirs for pneumatic lumbar support	
52	Switch for seat heating	
60-63	Seat squab	
65	Seat squab adjuster	
67-70	Seat squab cover	
80-81	Arm rests	

2.6 OVERVIEW DRAWING, LUXURY MODEL ISRI 6800



Item	Description	Note
5-8	Seat guides	
9	Rubber dust boot with fastening material	not shown
10	Guide for seat squab adjustment	
11-13	Side cover panels	
14	Front cover panels	
17	Back rest adjustment mechanism	Y-section (if any), not shown
20	Seat angle control knob	
21	Seat height control knob	
26	Gas spring with mounting material	
27	Adjuster cable assembly	
29	Back rest control knob	
40	Back rest	
44	Seat belt cover	
45	Seat belt lock without contact switch	
46	3-point seat belt	
47	Back rest cover	
60	Seat squab	
65	Seat squab adjuster	
67	Seat squab cover	

2.7 OVERVIEW DRAWING, STANDARD MODEL ISRI 6800



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Item	Description	Note
5-8	Seat guides	
11-13	Side cover panel	
14	Front cover panel	
15-16	Seat squab cover	
17	Back rest adjustment mechanism	Y-section (if any), not shown
29	Back rest control knob	
40-41	Back rest	
44	Seat belt cover	
45	Seat belt lock without contact switch	
46	3-point seat belt	
47-48	Back rest cover	
80-81	Arm rests	

7

3. INSPECTION AND ADJUSTMENT

3.1 INSPECTING SEAT BELT OPERATION

- Give a short pull on the seat belt to test the locking mechanism. During this test, the belt must lock. It must not be possible to pull the belt out any further after locking.
- Check the seat belts for wear.

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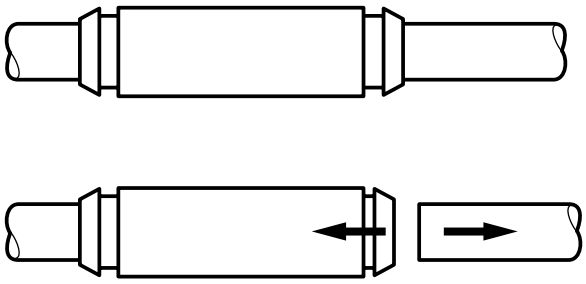
4. REMOVAL AND INSTALLATION

4.1 REMOVAL AND INSTALLATION, SEAT ASSEMBLY

Removing seat assembly

1. Remove the air pipe between the cab floor and the seat, at the rear of the seat, pressing the side of the quick-release coupling and pulling the pipe from the coupling.
2. Detach the seat heating connector (if installed) between the cab floor and the seat, at the rear of the seat.
3. Slide the seat backwards and remove the front screws (1).
4. Slide the seat forwards and remove the rear screws (2).



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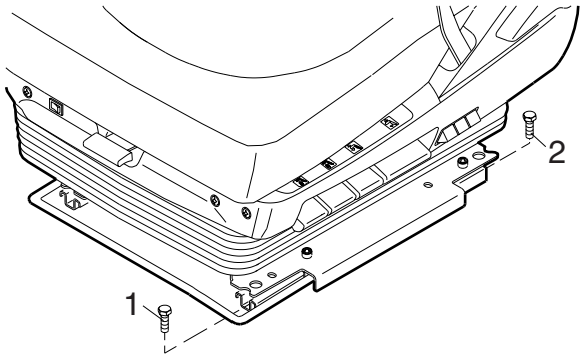
Installing seat assembly

1. Place the seat on the ground plate. Make sure that the air pipes do not get pinched off. Slide the seat backwards and tighten the front screws (1).
2. Slide the seat forwards and tighten the back screws (2).
3. Connect the air pipe.
4. Install the seat heater connector (if applicable).
5. Tighten the seat to the specified torque, see "Technical data".



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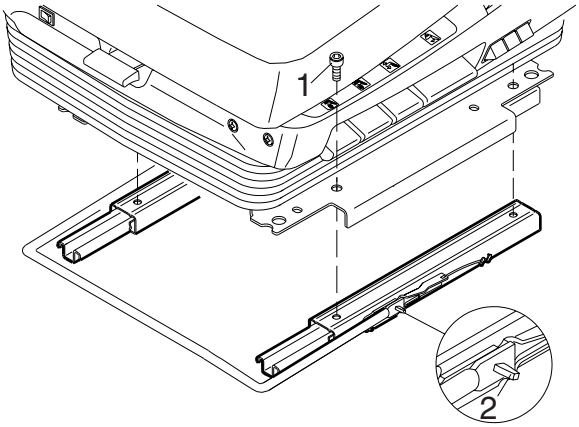
4.2 REMOVAL AND INSTALLATION, SEAT SLIDE

Removing seat slide

1. Remove the entire seat.
2. Remove the 4 attachment screws (1).
3. Bend back the bent pin (2) on either side and disassemble the bracket.

Installing seat slide

1. Install the bracket and bend the pin (2).
2. Fit the 4 attachment screws (1).
3. Install the entire seat.



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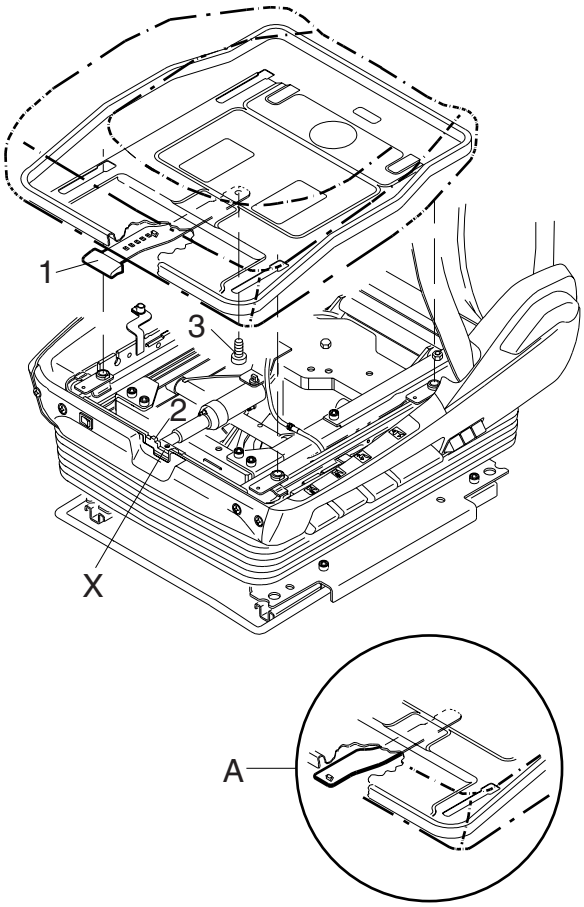
4.3 REMOVAL AND INSTALLATION, SEAT SQUAB

Removing seat squab

1. Slide the seat squab in the frontmost position (only for models with seat squab adjustment).
2. Remove the electric wiring from models with heated seats.
3. Push the control lever (1) up with a screwdriver (insert the screwdriver between frame -X- and the lever).
4. Pull the seat squab forwards and up.

Installing seat squab

1. Slide the seat squab approx. 10 mm into the guides at the back.
2. When doing so, press the seat squab at the front down into the guides.
3. Slide the seat squab in the frontmost guides until the lever (A) engages with a click.
4. After assembly, check whether the adjuster engages in the locking cam (2) in all openings of the runner (1). If necessary, align the runner to the left or the right.



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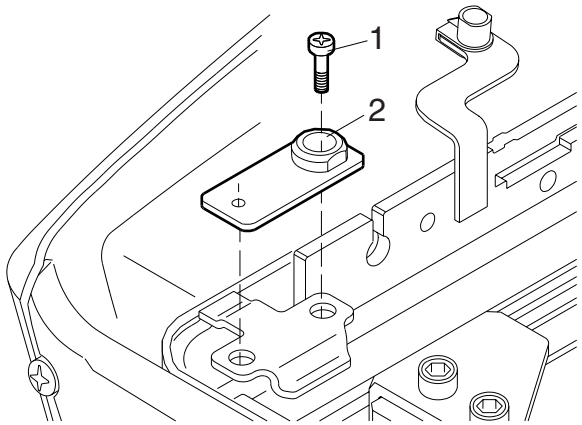
4.4 REMOVAL AND INSTALLATION, SEAT SQUAB GUIDE

Removing seat squab guide
1. Remove the seat squab.
2. Remove the screw (1) from the guide.
3. Remove the guide (2).

Installing seat squab guide
1. Install the guide (2).
2. Tighten the screw (1).
3. Fit the seat squab.



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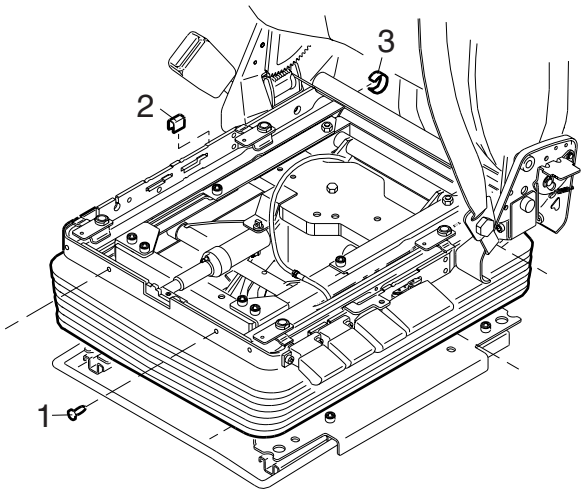
4.5 REMOVAL AND INSTALLATION, RUBBER DUST BOOT

Removing rubber dust boot
1. Remove the entire seat.
2. Remove the seat squab.
3. Remove the side cover on control side and the opposite side.
4. Release the attachment caps (1) and clamps (2) and (3).
5. Remove the seat belt mechanism and pull the rubber dust boot over it.
6. Pull the rubber dust boot over the controls and remove it via the bottom.

Installing rubber dust boot
1. Fit the rubber dust boot.
2. Fit the seat belt mechanism.
3. Fasten the rubber dust boot with the attachment caps (1) and clamps (2) and (3).
4. Fit the side covers.
5. Fit the seat squab.
6. Install the entire seat.



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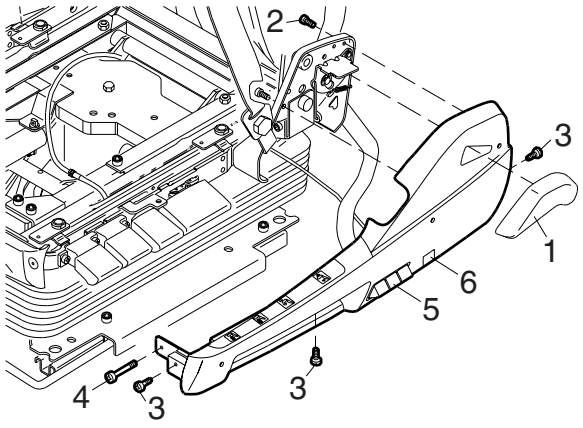
4.6 REMOVAL AND INSTALLATION, COVER PANEL ON CONTROL SIDE

Removing the cover panel on control side (including control valve for pneumatic lumbar support and seat heating switch)

1. Remove the seat squab.
2. Remove back rest adjuster button (1).
3. Remove the screws (2), (3) and (4).
4. Disconnect the plug of the seat heating operating switch (6) behind the back rest.
5. Remove the air pipes from the operating valve for the pneumatic lumbar support (5).



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Installing cover panel on control side

1. Install the plug of the seat heating operating switch (6).
2. Connect the air pipes for the operating valve for the pneumatic lumbar support (5).
3. Fit the screws (2), (3) and (4).
4. Fit the back rest adjuster button.
5. Fit the seat squab.

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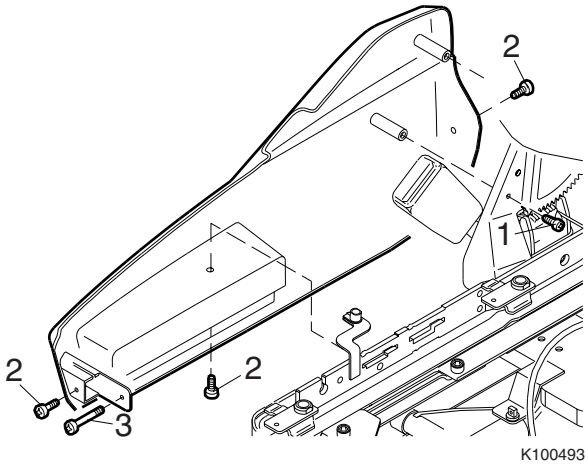
4.7 REMOVAL AND INSTALLATION, SIDE COVER PANEL

Removing side cover panel
1. Remove the seat squab.
2. Remove the screws (2), (3) and (1).

Installing side cover panel
1. Fit the screws (1), (2) and (3).
2. Fit the seat squab.



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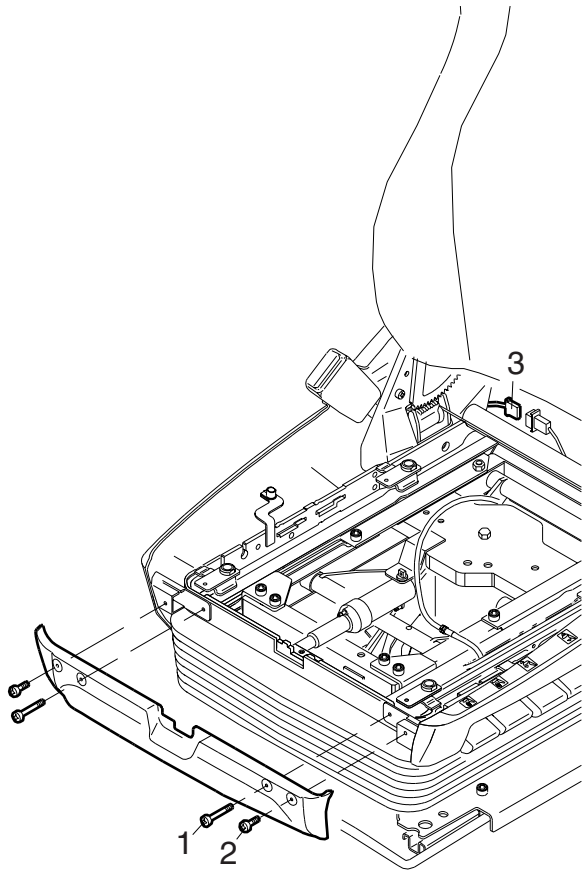
4.8 REMOVAL AND INSTALLATION, FRONT COVER PANEL

Removing front cover panel
1. Remove the seat squab.
2. Remove the screws (1) and (2).
3. Remove the front cover panel.

Installing front cover panel
1. Fit the front cover panel.
2. Fit the screws (1) and (2).
3. Fit the seat squab.



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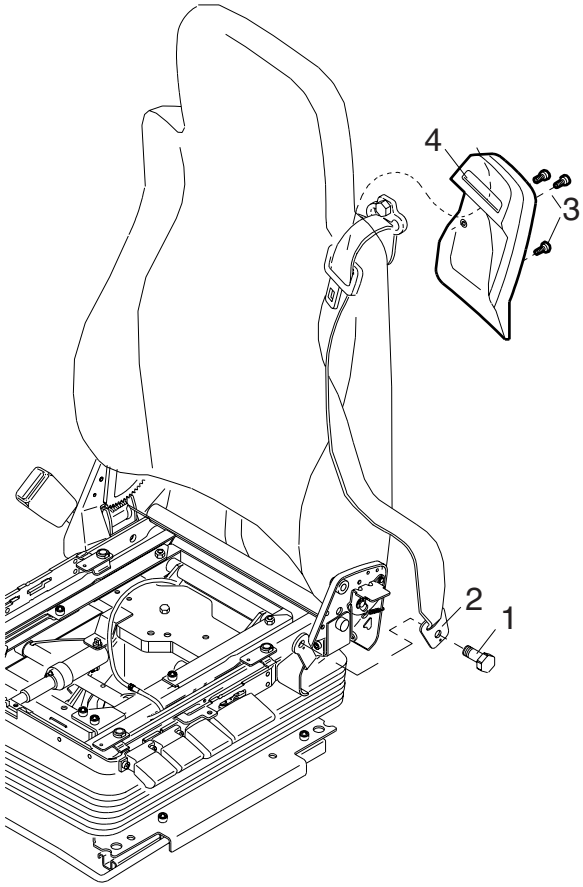
4.9 REMOVAL AND INSTALLATION, SEAT BELT GUIDE PANEL

Removing seat belt guide panel

1. Remove the cover panel on control side.
2. Remove the bolt (1) from the seat belt attachment plate (2) and unscrew the screws (3) in the cover.
3. Pull the seat belt (2) through the opening (4).

Installing seat belt guide panel

1. Guide the seat belt (2) through the opening (4).
2. Secure the seat belt attachment plate (2) with the specified torque.



K100495

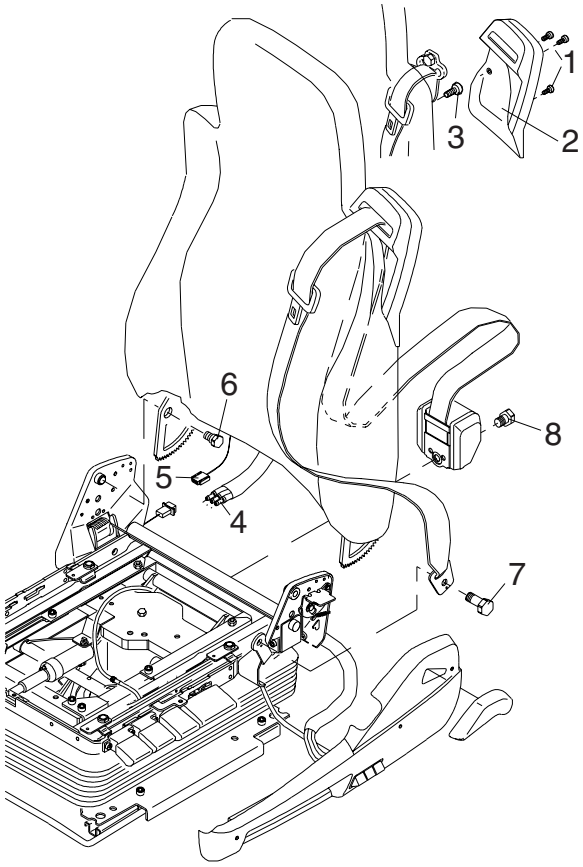
4.10 REMOVAL AND INSTALLATION, BACKREST

Removing back rest

1. Remove the seat squab.
2. Unscrew the screws (1) from the cover (2) and remove screw (3) from the mounting plate.
3. Remove the seat belt from the back rest.
4. Remove the electric plug connector (5) (if fitted).
5. Remove the attachment screws (6) from the back rest.
6. Fold the back rest down.
7. Click the back rest out of the side rails of the frame.
8. Remove the back rest from the frame.

System with pneumatically adjusted lumbar support

1. Remove the seat.
2. Remove the seat squab.
3. Unscrew the screws (1) from the cover (2) and remove screw (3) from the mounting plate.
4. Remove screw (8) from the seat belt roll and screw (7) from the seat belt mounting bracket.
5. Remove the belt.
6. Remove the rubber air hoses (4) (connection is underneath the seat belt roll holder) and the electric plug connector (5) (if applicable).
7. Remove the attachment screws (6) from the back rest.
8. Fold the back rest down.
9. Click the back rest out of the side rails of the frame.
10. Remove the back rest from the frame.



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Installing back rest

1. Click the folded back rest in the side rails of the frame.
2. Fix the back rest with attachment bolts (6), tightening the bolts to the specified torque. See "Technical data".
3. Connect the air hoses (4) and the seat heating connector (5) (if fitted).
4. Fit the screw (3) in the mounting plate, together with the belt.
5. Fit the cover (2).
6. Fit screw (8) of the seat belt roll and screw (7) of the seat belt mounting bracket.
7. Fit the seat squab.
8. Fit the seat.

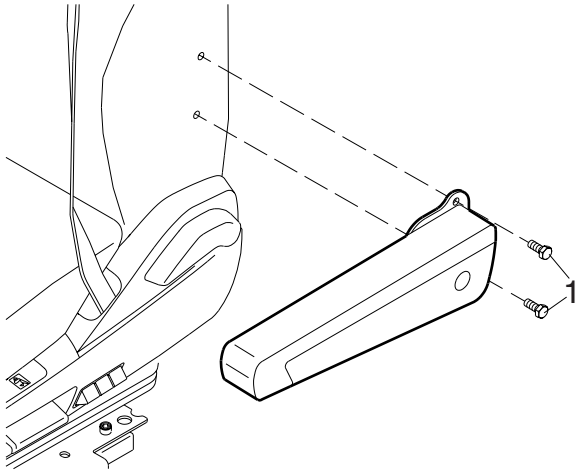
4.11 REMOVAL AND INSTALLATION, ARM REST

Removing arm rest

1. Remove the black covers.
2. Unscrew and remove the screws (1) from the arm rest.

Installing arm rest

1. Fit the screws and install the black covers.



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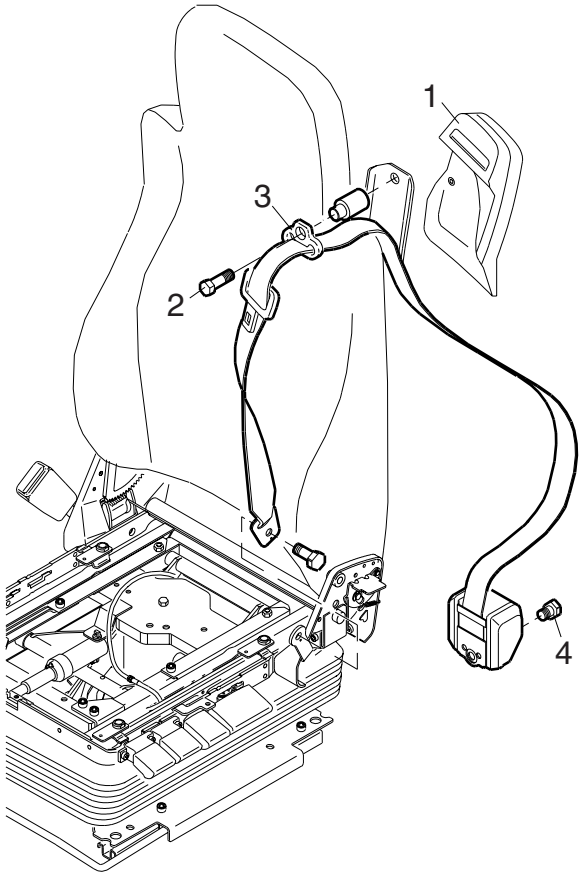
4.12 REMOVAL AND INSTALLATION, SEAT BELT MECHANISM

Removing seat belt mechanism

1. Remove the side cover panel on control side without disconnecting the air hoses of the control valve for the pneumatic lumbar support or the seat heating.
2. Remove the cover (1).
3. Remove the screw (2) from the mounting plate (3).
4. Remove the screw (4) from the seat belt roll.
5. Remove the screw (5) from the lower seat belt mount.

Installing seat belt mechanism

1. Install the seat belt mounts and tighten them to the specified tightening torque, see "Technical data".
2. Fit the seat belt roll and secure it with the specified torque.
3. Fit the cover (1).
4. Install the side cover panel on control side.



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4.13 REMOVAL AND INSTALLATION, SEAT BELT LOCK

Removing seat belt lock

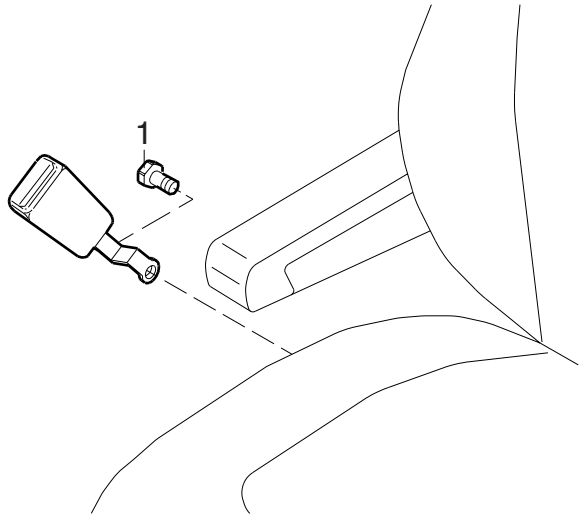
1. Remove the side cover panel opposite the control side.

2. Remove the bolt (1).

Installing seat belt lock

1. Install the lock mechanism and tighten the bolt to the specified tightening torque. See "Technical data".

2. Fit the side cover panel.



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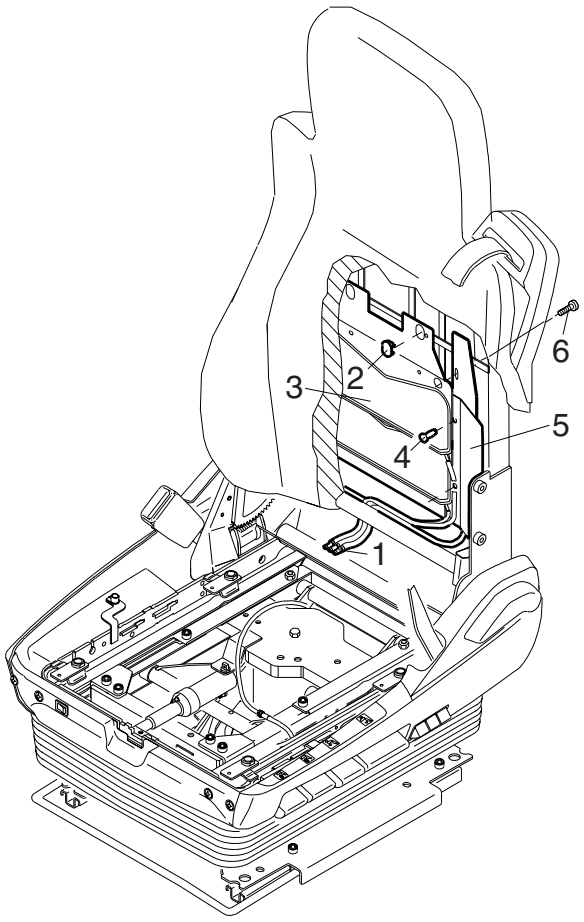
4.14 REMOVAL AND INSTALLATION, AIR RESERVOIRS FOR PNEUMATIC LUMBAR SUPPORT

Removing air reservoirs for pneumatic lumbar support

1. Carefully remove part of the back rest cover and slide it more than halfway upwards.
2. Remove the four screws (6) (depending on model).
3. Carefully remove the shaped foam at the bottom of the frame.
4. Remove the pipes (1) (located underneath the seat belt roll holder).
5. Remove the two clips (2) and remove the air reservoir(s) (3).
6. Remove the side air reservoirs (5).

Installing air reservoirs for pneumatic lumbar support

1. Install the air reservoirs (3) and (5) and secure them with the clips (2).
2. Connect the pipes.
3. Install the shaped foam.
4. Fit the four screws (6).
5. Fit the cover.



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4.15 REMOVAL AND INSTALLATION, HEATING ELEMENTS

Removing seat squab heating element

1. Remove the seat squab.
2. Remove the connector (3) from the electric wiring.
3. Remove the seat squab cover.
4. Carefully remove the heating element (1) from the shaped foam (use a knife, if necessary).

Removing back rest heating element

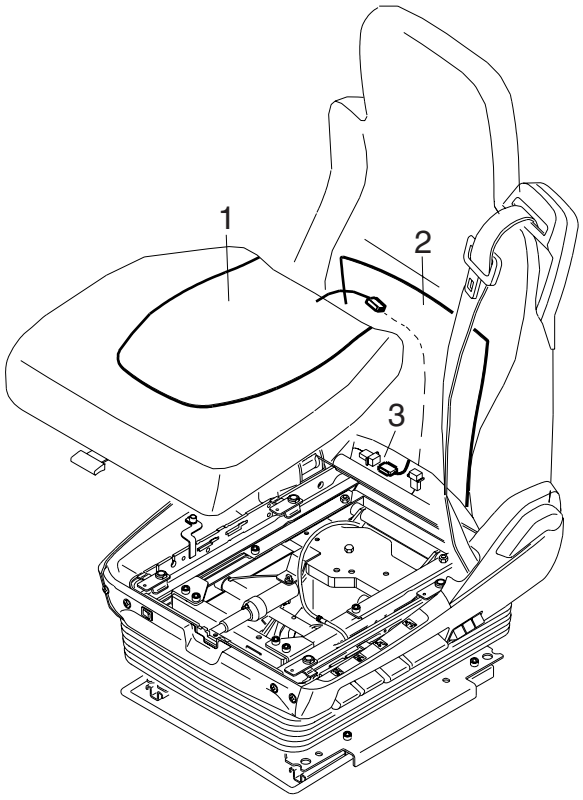
1. Pull the back rest cover up as far as the white loop for the padding thread, without removing the back rest cover.
2. Carefully remove the heating element (2) from the shaped foam (use a knife, if necessary).

Installing seat squab heating element

1. Install a new heating element (1) and secure it with double-sided adhesive tape.
2. Connect the connector (3) of the heating element (1).
3. Fit the cover.

Installing back rest heating element

1. Install a new heating element (2) and secure it with double-sided adhesive tape.
2. Connect the connector (3) of the heating element (2).
3. Fit the cover.



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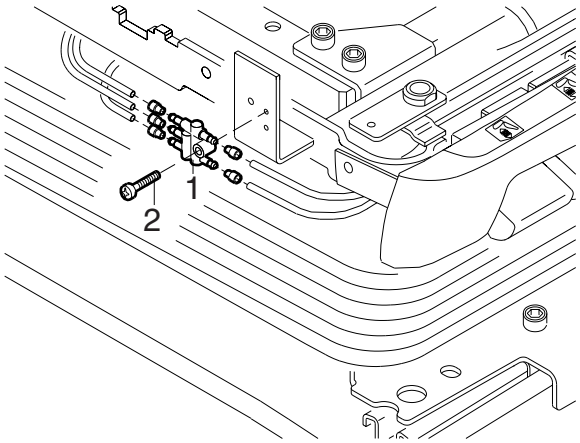
4.16 REMOVAL AND INSTALLATION, SWITCH VALVE

Removing switch valve

1. Remove the seat squab.
2. Put the seat squab in the highest tilting position.
3. Release the rubber bellows at the front of the seat frame.
4. Remove the screw (2) from the switch valve.
5. Disconnect the air pipes from the switch valve (1).



K100503

Installing switch valve

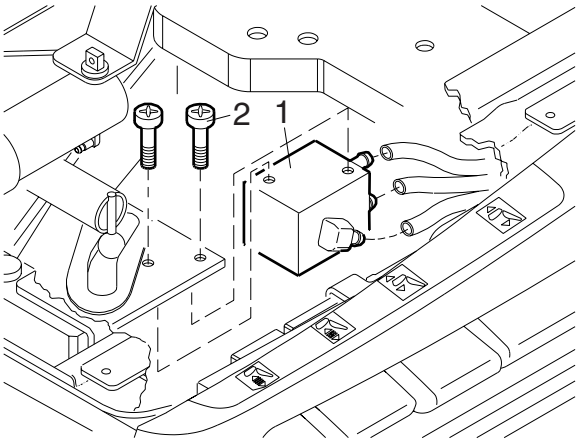
1. Connect the air pipes to the switch valve.
2. Put the seat squab in the highest tilting position.
3. Install the switch valve.
4. Fit the rubber dust boot.
5. Fit the seat squab.

7

4.17 REMOVAL AND INSTALLATION, HEIGHT CONTROL VALVE

Removing height control valve

1. Remove the seat squab.
2. Remove the screws (2).
3. Disconnect the air pipes from the height control valve (1).



K100504

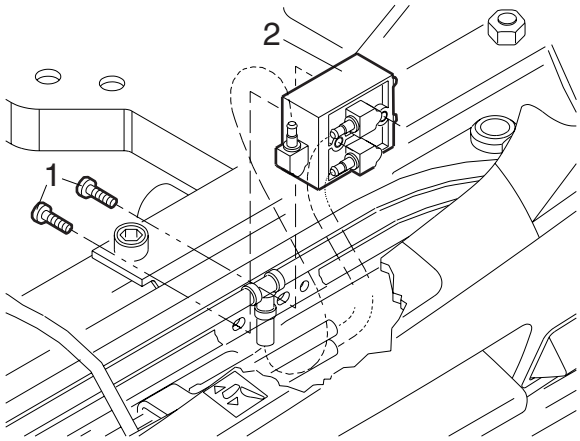
Installing height control valve

1. Connect the air pipes of the height control valve (1).
2. Secure the control valve with the screws (2).
3. Fit the seat squab.

4.18 REMOVAL AND INSTALLATION, HEIGHT ADJUSTMENT VALVE

Removing height adjustment valve

1. Remove the seat squab.
2. Place the seat in the highest tilting position.
3. Remove the screws (1).
4. Disconnect the air pipes from the valve.
5. Remove the valve (2).



K100505

Installing height adjustment valve

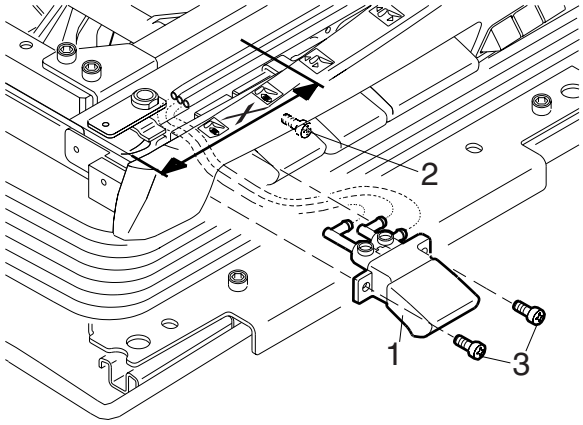
1. Connect the air pipes to the valve (2).
2. Secure the valve (2) with the screws (1).
3. Fit the seat squab.

7

4.19 REMOVAL AND INSTALLATION, ENTRY/EXIT AID HANDLE

Removing entry/exit aid handle

1. Remove the seat squab.
2. Cut the air pipes of the entry/exit aid control handle according to size X (X = 130 mm).
3. Remove the side cover panel (without disconnecting the air pipes from the valves or the seat heating).
4. Slightly loosen the screw (2).
5. Remove the screws (3) from the entry/exit aid handle and remove the handle along the upper side.



K100506

Installing entry/exit aid handle

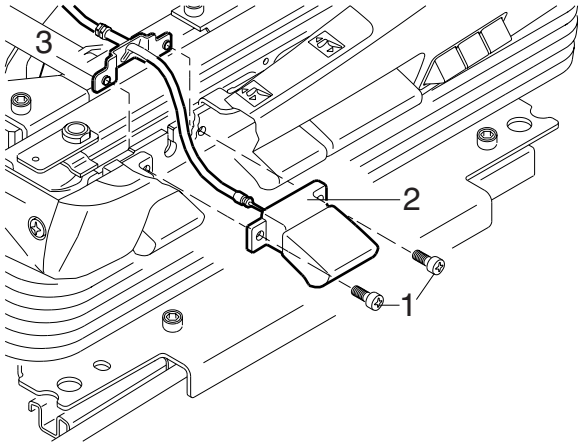
1. To install a new handle, it must be reconnected to the cut section X (repair kit includes handle and sections of pipe and connection pieces).
2. Attach the air pipes of the handle (1) to the cut air pipes. Use the same length as that which was cut during removal.
3. Fit the handle (1) and secure it with the screws (3).
4. Tighten the screw (2).
5. Fit the side cover panel.
6. Fit the seat squab.

7

4.20 REMOVAL AND INSTALLATION, VERTICAL DAMPING ADJUSTER

Removing vertical damping adjuster

1. Remove the seat squab.
2. Remove the side cover panel (without disconnecting the air pipes from the valves or the seat heating).
3. Remove the screws (1).
4. Remove the shock absorber cable (remove the lock ring (2) in the lowest position of the system, and kink the cable from its holder (6) when the system is in the highest position).



K100507

Installing vertical damping adjuster

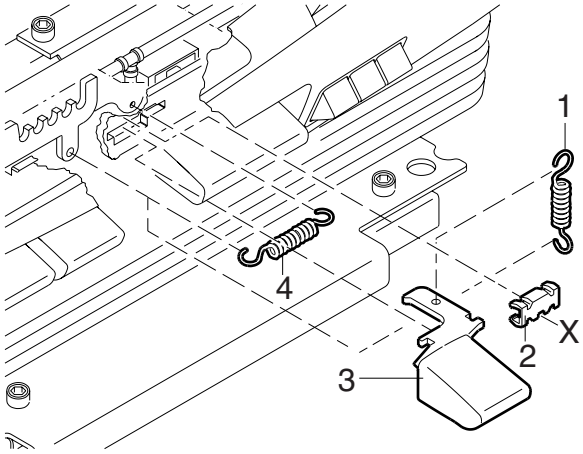
1. Install the combined cable and mounting plate assembly (3) and the control handle through the opening in the rubber bellows into the frame.
2. Secure the handle (2) with the screws (1).
3. Fit the side cover panel.
4. Install the adjustment cable before the seat cushion is fitted.
5. Adjust the cable before fitting the seat squab.
6. Fit the seat squab.

7

4.21 REMOVAL AND INSTALLATION, SEAT TILTING HANDLE

Removing seat tilting handle

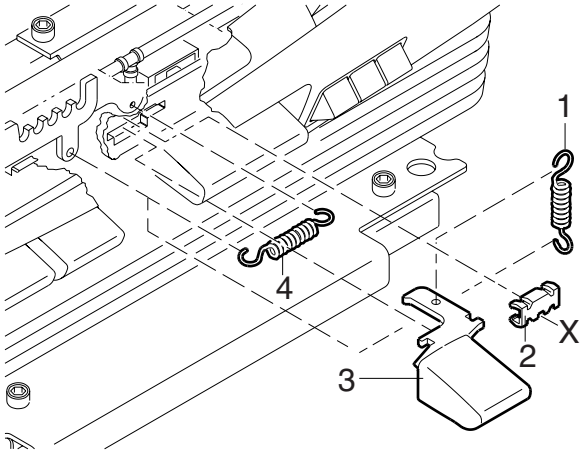
1. Remove the seat squab.
2. Remove the springs (1) and (4).
3. Remove the plastic connection piece (2) by sliding it towards the back rest.
4. Remove the control button (3) by lifting it and pulling it out.



K100508

Installing seat tilting handle

1. Fit the seat tilting handle (3).
2. Fit the plastic connection piece (2). Note the position of the small slot (X) when fitting the new connection piece (2).
3. Fit the springs (1) and (4).
4. Fit the seat squab.

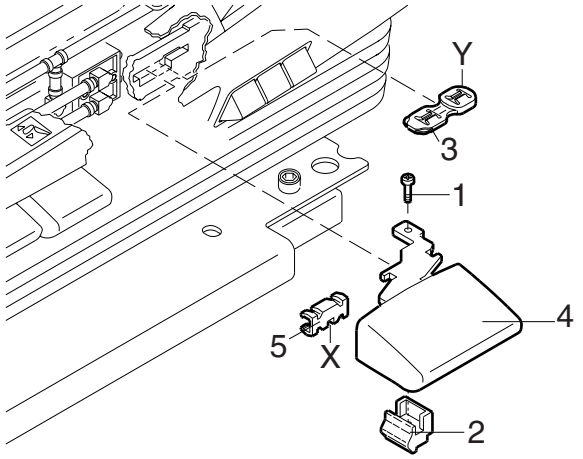


K100508

4.22 REMOVAL AND INSTALLATION, HEIGHT ADJUSTMENT HANDLE

Removing height adjustment handle

1. Remove the seat squab.
2. If necessary, remove the side cover panel (without disconnecting the air pipes from the valves or the seat heating).
3. Remove the screw (1) and the plastic connection piece (2).
4. Remove the upper plate (3) by pushing it out at position Y and pulling it from the frame.
5. Remove the handle (4).
6. Remove the plastic connection piece (5).



K100509

Installing height adjustment handle

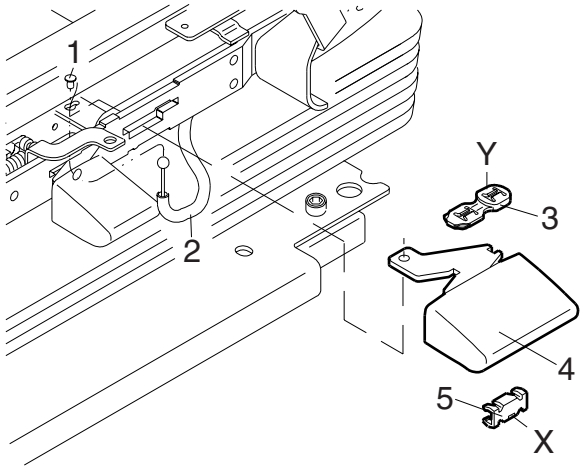
1. Fit the plastic connection piece (5). Note the position of the small slot (X) when installing the new connection piece (5).
2. Fit the handle (4).
3. Install the plate (3).
4. If the side cover panel was removed, reinstall it.
5. Fit the seat squab.

7

4.23 REMOVAL AND INSTALLATION, FIXED SEAT HEIGHT ADJUSTMENT HANDLE

Removing height adjustment handle

1. Remove the seat squab.
2. If necessary, remove the side cover panel (without disconnecting the air pipes from the valves or the seat heating).
3. Remove the screw (1) and the plastic connection piece (2).
4. Remove the upper plate (3) by pushing it out at position Y and pulling it from the frame.
5. Remove the handle (4).
6. Remove the plastic connection piece (5).



K100512

Installing height adjustment handle

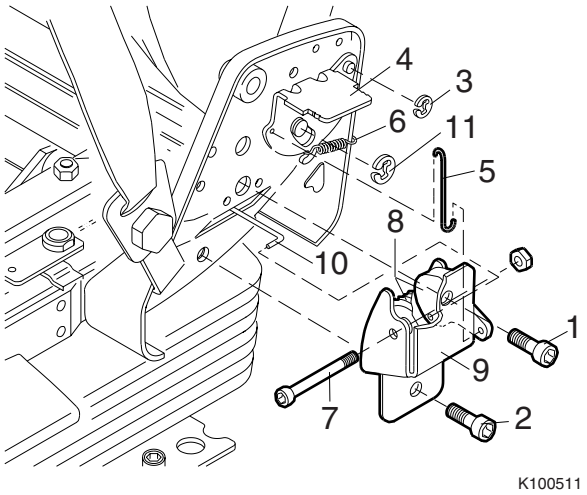
1. Fit the plastic connection piece (5). Note the position of the small slot (X) when installing the new connection piece (5).
2. Fit the handle (4).
3. Install the plate (3).
4. If the side cover panel was removed, reinstall it.
5. Fit the seat squab.

7

4.24 REMOVAL AND INSTALLATION, BACK REST ADJUSTER

Removing back rest adjuster without Y-section

1. Remove the seat squab.
2. Remove the side cover panel without disconnecting the pipes.
3. Fold the back rest forward until it stops.
4. Remove the screws (1) and (2) on control side and on the opposite side.
5. Remove the lock rings (3) and (11).
6. Lift the spring (6) and pull the control plate (4) from the axle, after which the wire (5) can be removed.
7. Loosen the screw (7) of the back rest adjuster and remove it.
8. Push the tooth segment assembly from the bracket (9) until the wire (10) can be removed.



K100511

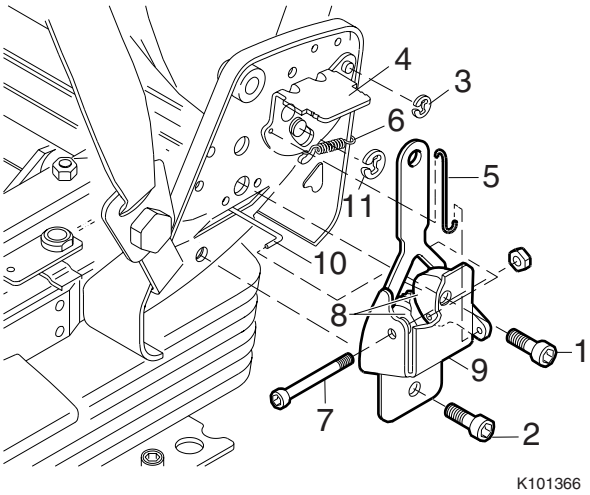
Installing back rest adjuster without Y-section

1. Fit the adjuster together with the wire (10) on one side.
2. Fit the wire (10) into the tooth segment assembly at the other side.
3. Insert the screw (7) into the back rest adjuster.
4. Lift the spring (6) and fit the control plate (4) onto the axle, after which the wire (5) can be installed.
5. Connect the lock rings (3) and (11).
6. Insert the screws (1) and (2) on control side and on the opposite side.
7. Fit the side cover panel and the seat squab.

7

Removing back rest adjuster with Y-section

1. Remove the seat squab.
2. Remove the back rest.
3. Remove the side cover panel without disconnecting the pipes.
4. Remove the screws (1) and (2) on control side and on the opposite side.
5. Remove the lock rings (3) and (11).
6. Lift the spring (6) and pull the control plate (4) from the axle, after which the wire (5) can be removed.
7. Loosen the screw (7) of the back rest adjuster and remove it.
8. Push the tooth segment assembly from the bracket (9) until the wire (10) can be removed.



K101366

Installing back rest adjuster with Y-section

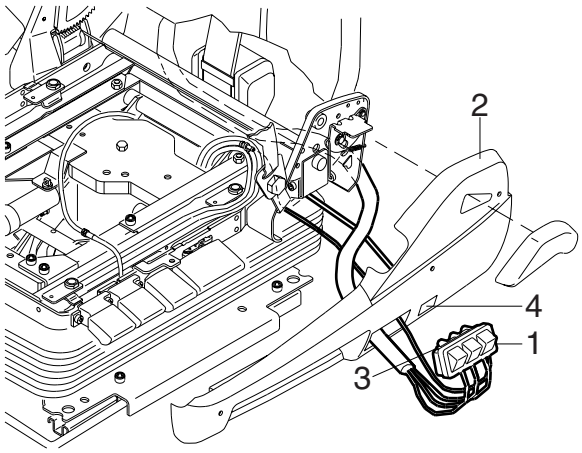
1. Fit the adjuster together with the wire (10) on one side.
2. Fit the wire (10) into the tooth segment assembly at the other side.
3. Insert the screw (7) into the back rest adjuster.
4. Lift the spring (6) and fit the control plate (4) onto the axle, after which the wire (5) can be installed.
5. Connect the lock rings (3) and (11).
6. Insert the screws (1) and (2) on control side and on the opposite side.
7. Fit the side cover panel and the seat squab.

7

4.25 REMOVAL AND INSTALLATION, OPERATING VALVE FOR PNEUMATIC LUMBAR SUPPORT

Removing operating valve for pneumatic lumbar support

1. Remove the seat squab.
2. Remove the side cover panel on control side without disconnecting the pipes.
3. Remove the air pipes from the operating valve for the pneumatic lumbar support (1).
4. Use a screwdriver to lift the operating valve for the pneumatic lumbar support (1) from the cover (2) (the valve may be damaged slightly in the process).



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Installing operating valve for pneumatic lumbar support

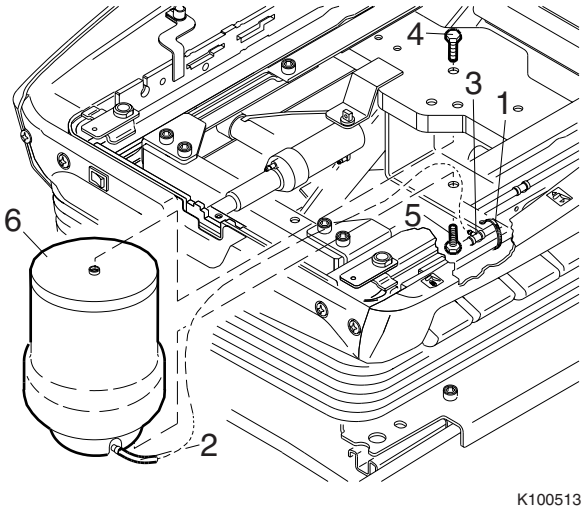
1. Fit the operating valve for the pneumatic lumbar support. When fitting, position the new valve in such a way that the top (3) can be hooked in and then be pushed down into the side cover.
2. Connect the air pipes for the operating valve for the pneumatic lumbar support (1).
3. Install the side cover panel on control side.
4. Fit the seat squab.

7

4.26 REMOVAL AND INSTALLATION, AIR BELLOWS

Removing air bellows

1. Remove the entire seat.
2. Remove the seat squab.
3. Remove the clamping strip (1) (by cutting it).
4. Disconnect the air pipe (2) from the manifold (3).
5. Unscrew the screws (4) and (5) to be able to remove the air bellows including the air pipe.



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Installing air bellows

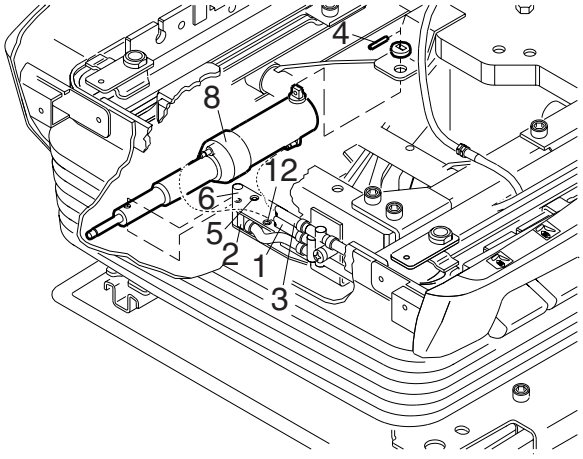
1. Install the air bellows (6). In doing so, make sure that the air bellows are not twisted. If this is nevertheless the case, loosen screw (4) a few turns and apply spring action to the system under pressure; then tighten screw (4) again while the air bellows are still under pressure.
2. Tie the pipes together with a clamping strip.
3. Fit the seat squab.
4. Install the entire seat.

7

4.27 REMOVAL AND INSTALLATION, ADJUSTMENT CYLINDER

Removing adjustment cylinder

1. Remove the seat squab.
2. Lock the seat in its highest position.
3. Disconnect the air pipes (1) and (3) of the adjustment cylinder.
4. Remove the retainer pin (4).
5. Remove the screw (5).
6. Push the metal plates that hold the cylinder apart and remove the adjustment cylinder.



K100514

Installing adjustment cylinder

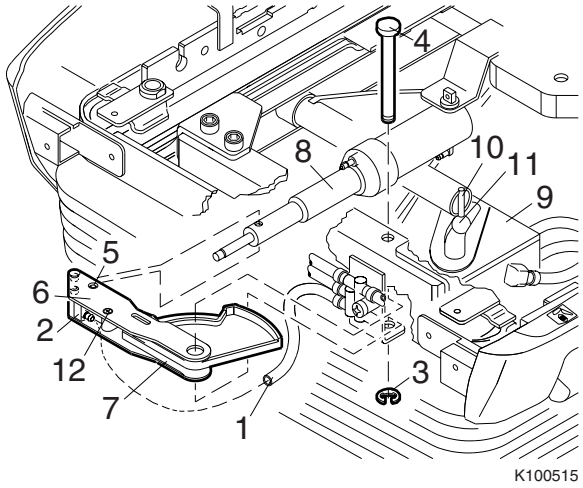
1. Push the metal plates that hold the cylinder apart and insert the adjustment cylinder (2).
2. Install the retainer pin (4).
3. Connect the air pipes (1) and (3) to the adjustment cylinder.
4. Tighten the screw (5) slightly during installation.
5. Release the lock and operate the height adjustment button (upwards). Check whether the cylinder (2) moves freely. If not, loosen screw (5) slightly.
6. Fit the seat squab.

7

4.28 REMOVAL AND INSTALLATION, CONTROL UNIT OF THE HEIGHT CONTROL VALVE

Removing control unit of height control valve

1. Remove the seat squab and remove the rubber dust boot at the front.
2. Lock the system in the highest position.
3. Disconnect the air pipe (1) from the cylinder (2).
4. Remove the lock ring (3) and pin (4).
5. Loosen the screw (5) slightly and push the holder (6) of the control discs (7) a little apart. This makes it possible to pull the control discs from the adjustment cylinder (8). The guide plate (9) must remain attached to the pin (10). Push the ball (11) back onto the pin (10) if it has come loose.



Installing control unit of height control valve

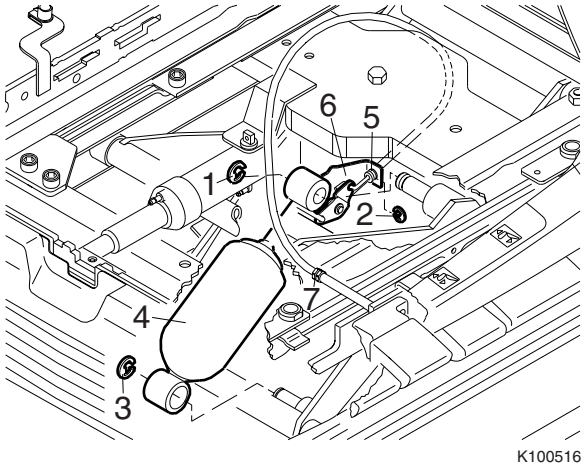
1. Tighten the screw (5) slightly during installation.
2. Operate the height adjuster (upwards) and check whether the cylinder moves freely. If not, loosen screw (5) slightly.

7

4.29 REMOVAL AND INSTALLATION, VERTICAL DAMPER

Removing vertical damper

1. Remove the seat squab.
2. Slide the entire seat forward.
3. Remove the locking ring (2) when the seat is in its lowest position.
4. Remove the locking ring (1).
5. Lock the seat in its highest position.
6. Remove the rubber dust boot at the front and remove the locking ring (3).



Installing vertical damper

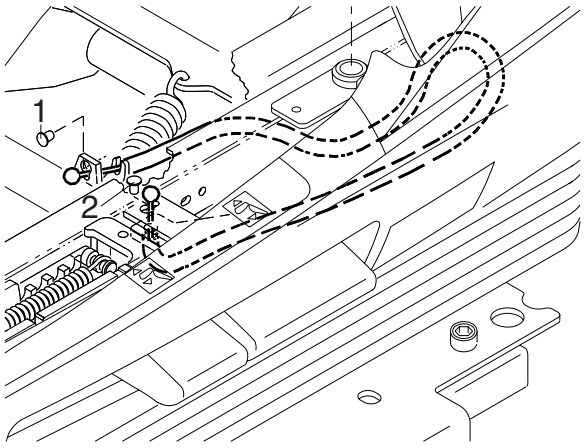
1. Fit the damper and use the locking ring (3) to secure it at the bottom.
2. Release the lock.
3. Install the locking ring (1).
4. Place the seat in the frontmost and lowest position and install the locking ring (2).
5. Before installing the seat squab, set the damping cable (5) in such a way as to achieve the stiffest damping when the control handle is in the top position. To make this adjustment, first release the lock nut (7). Tighten lock nut (7) after completion of the adjustment.

7

4.30 REMOVAL AND INSTALLATION, BOWDEN CABLE FOR FIXED SEAT GAS DAMPER

Removing Bowden cable for fixed seat gas damper

1. Remove the seat squab.
2. Remove the stops (1) and (2).
3. Remove the Bowden cable by taking it from the attachment points.



K100517

Installing Bowden cable for fixed seat gas damper

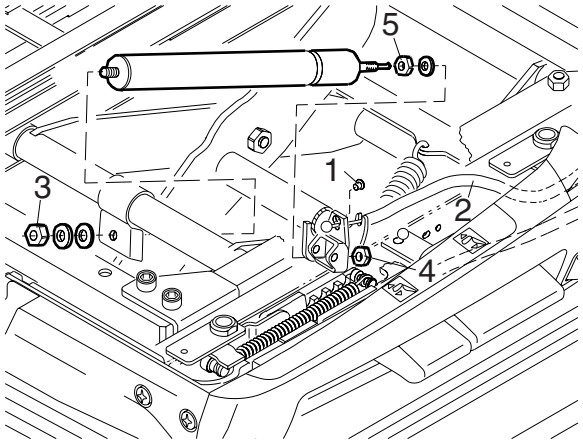
1. After fitting the new Bowden cable, check the height adjustment. If necessary, adjust the Bowden cable setting by turning the screws for the Bowden cable away from or towards one another.
2. Then tighten the Bowden cable using the check nut.

7

4.31 REMOVAL AND INSTALLATION, FIXED SEAT GAS DAMPER

Removing fixed seat gas damper

1. Remove the seat squab.
2. Place the seat in its lowest position.
3. Remove the stop (1) and Bowden cable (2) (making sure not to operate the button).
4. Release nuts (3) and (4).
5. Pull the chair upwards, so that the gas spring ejects from its holder.



K100518

Installing fixed seat gas damper

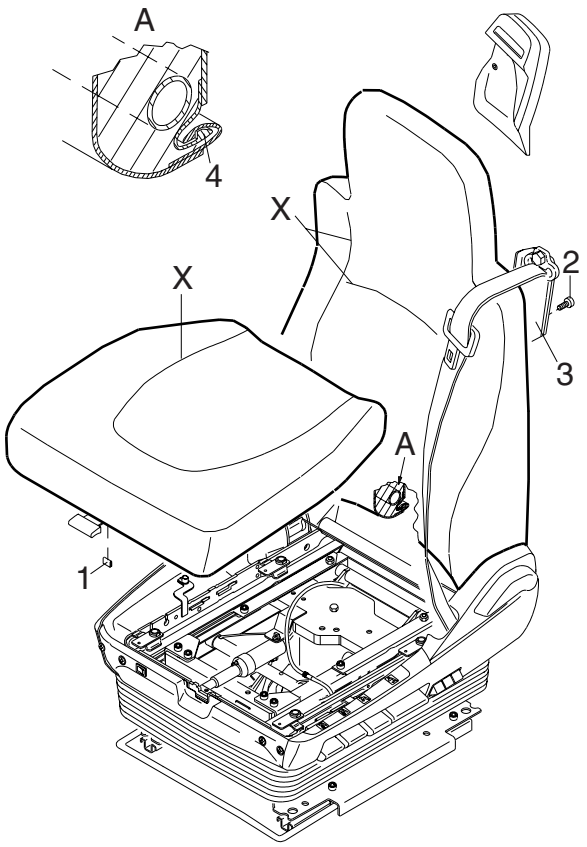
1. When installing a new gas spring, tighten the check nut (5) (in the same position as the previous gas spring).
2. After fitting, check the height adjustment and, if necessary, modify the Bowden cable adjustment.
3. Fit the seat squab.

4.32 REMOVAL AND INSTALLATION, SEAT SQUAB COVER

At the positions marked with an X, the covers are attached to the shaped foam with Velcro fastener.

Removing seat squab cover

1. Remove the seat squab.
2. Remove the clamps from the groove around the bottom of the seat.
3. Remove the seat squab cover from the groove around the bottom of the seat.



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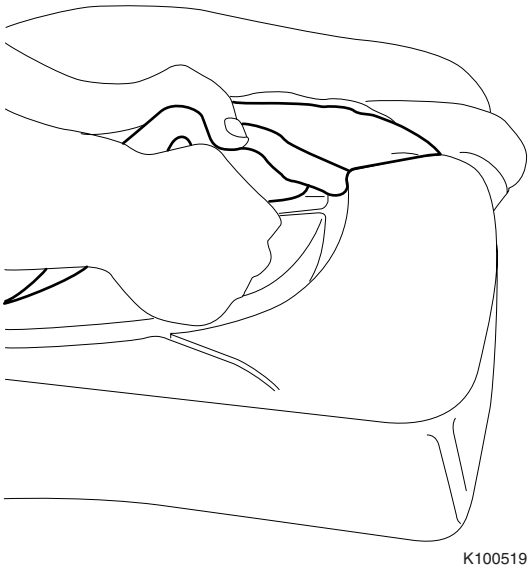
4. Carefully remove the cover little by little from the shaped foam. At the same time, hold the Velcro fastener in the shaped foam (pushing it down) to prevent it from being torn loose.


K100519

Installing seat squab cover

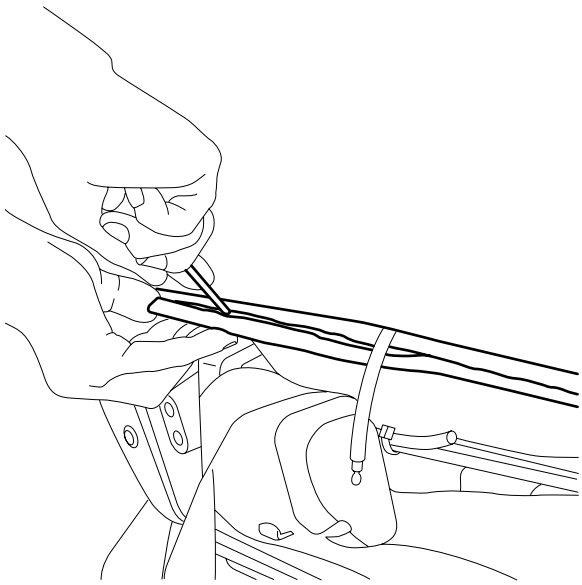
1. Fit the seat squab cover in the groove around the bottom of the seat; make sure that the Velcro is in the right place.
2. Fix the seat squab cover with clamps in the groove around the bottom of the seat.

4.33 REMOVAL AND INSTALLATION, BACK REST COVER

Removing back rest cover

1. Remove the seat belt guide panel.

2. Remove the cover by unhooking it from the section at the bottom.



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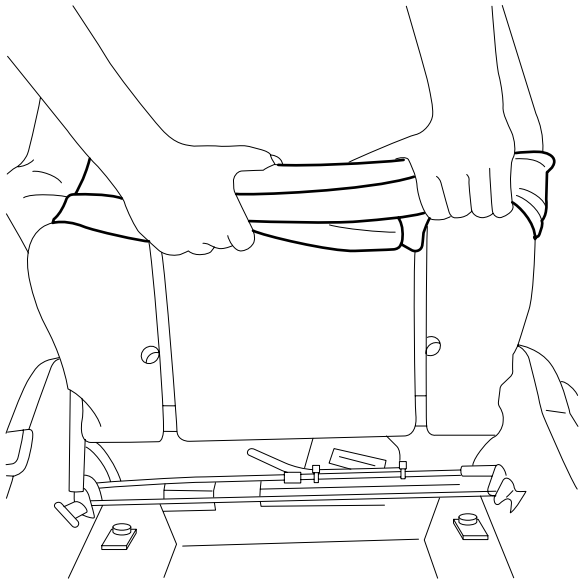
3. Carefully remove the cover little by little from the shaped foam. At the same time, hold the Velcro fastener in the shaped foam (pushing it down) to prevent it from being torn loose.

Installing back rest cover

1. Fit the cover in such a way that the Velcro fastener is in the correct position, and secure the cover in the profile at the bottom.



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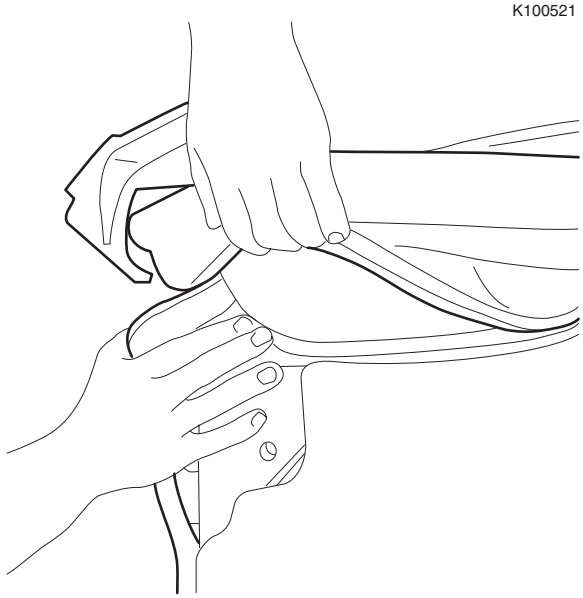

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1. SAFETY INSTRUCTIONS

1.1 SAFETY INSTRUCTIONS

General
The cab is equipped with a hydraulic tilting mechanism. The pump is located on co-driver side at the rear of the cab. The cab locks are opened hydraulically during pumping.

Before tilting the cab, make sure that the doors are closed, that there are no loose items in the cab and that the gear lever is in neutral. Tilt the cab fully forward if work must be carried out underneath the cab.

You can stop the cab tilting forward at any time by turning the cock to the reverse tilting position.

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2. INSPECTION AND ADJUSTMENT

2.1 ADJUSTING ROOF SPOILER

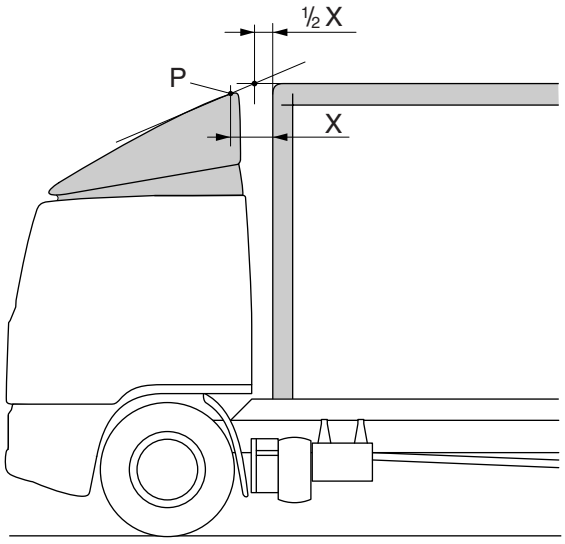
Note:
Correct adjustment of the roof spoiler is essential to minimise fuel consumption.

1. Place the vehicle on a level and horizontal surface. Make sure that in the case of a tractor/semi-trailer combination the tractor is straight in front of the semi-trailer.

2. Determine the centreline of the vehicle and put a slat on the superstructure roof protruding into the cab direction.

3. Put another slat (as a tangent) onto the outer roof spoiler edge (P) pointing into the direction of the superstructure.

4. Both slats should cross at half the distance (½ X) between the roof spoiler edge and the start of the superstructure.
The roof spoiler height can be adjusted using adjusting mechanism (B). For the roof spoiler adjusting range see "Technical data".



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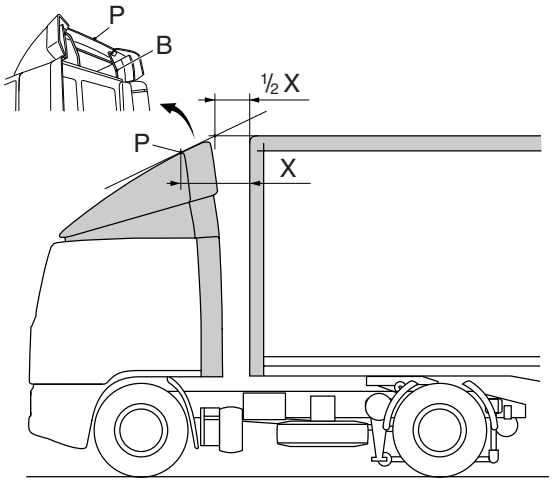

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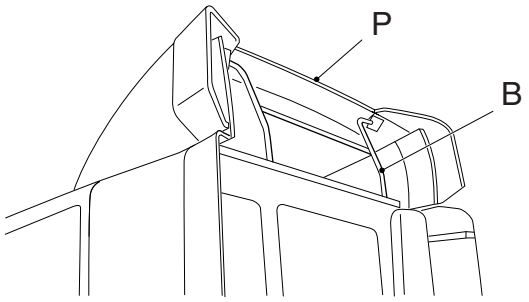

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3. REMOVAL AND INSTALLATION

3.1 REMOVAL AND INSTALLATION, ROOF SPOILER (BASIC)

Removing roof spoiler (basic)

1. Remove the four attachment nuts from the cab roof attachment frame.

2. Take the roof spoiler from the cab roof.

Installing roof spoiler (basic)

1. Position the roof spoiler with attachment frame onto the studs on the cab roof.

2. Fit the four attachment nuts of the attachment frame.

3. Check the setting of the roof spoiler, see chapter 'Inspection and adjustment".

3.2 REMOVAL AND INSTALLATION, ROOF SPOILER (AERODYNAMIC)

Removing roof spoiler (aerodynamic)

1. Remove the four attachment nuts from the cab roof attachment frame.
2. Take the roof spoiler from the cab roof.
3. Remove the attachment bolts from the roof spoiler side sections and remove the side sections from the cab roof.

Installing roof spoiler (aerodynamic)

1. Fit the roof spoiler side sections on the cab roof, using the attachment bolts.
2. Position the roof spoiler with attachment frame onto the studs on the cab roof.
3. Fit the four attachment nuts of the attachment frame.
4. Check the setting of the roof spoiler, see chapter 'Inspection and adjustment".

3.3 REMOVAL AND INSTALLATION, FENDER ASSEMBLY

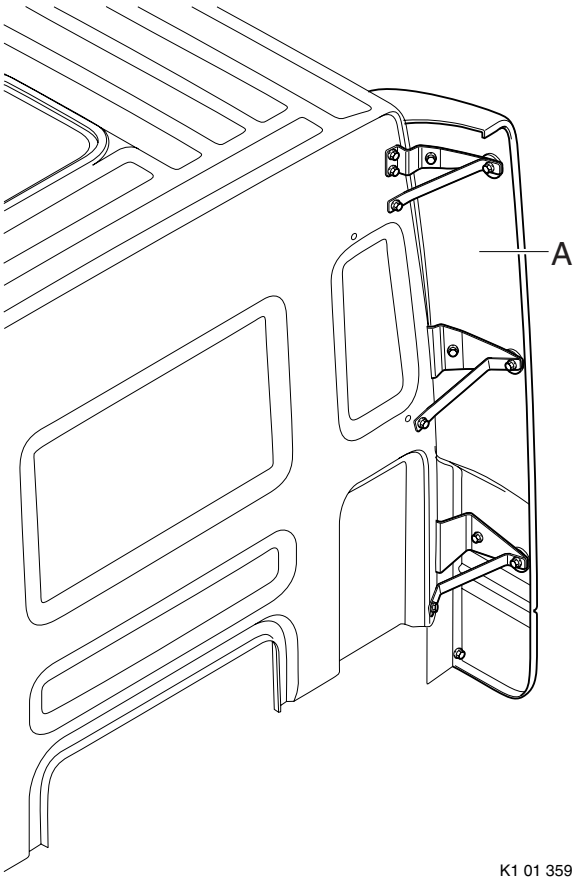
Note:
Take care not to damage the paint. Repair any damaged paint using the right type of paint.

Removing fender assembly (cab without roof spoiler)

1. Remove the attachment bolts and remove the fender (A) from the cab.

Installing fender assembly (cab without roof spoiler)

1. Fit the fender (A) using the attachment bolts.



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3.4 REMOVAL AND INSTALLATION, ROOF SPOILER EXTENSION PIECES COMBINED WITH FENDERS

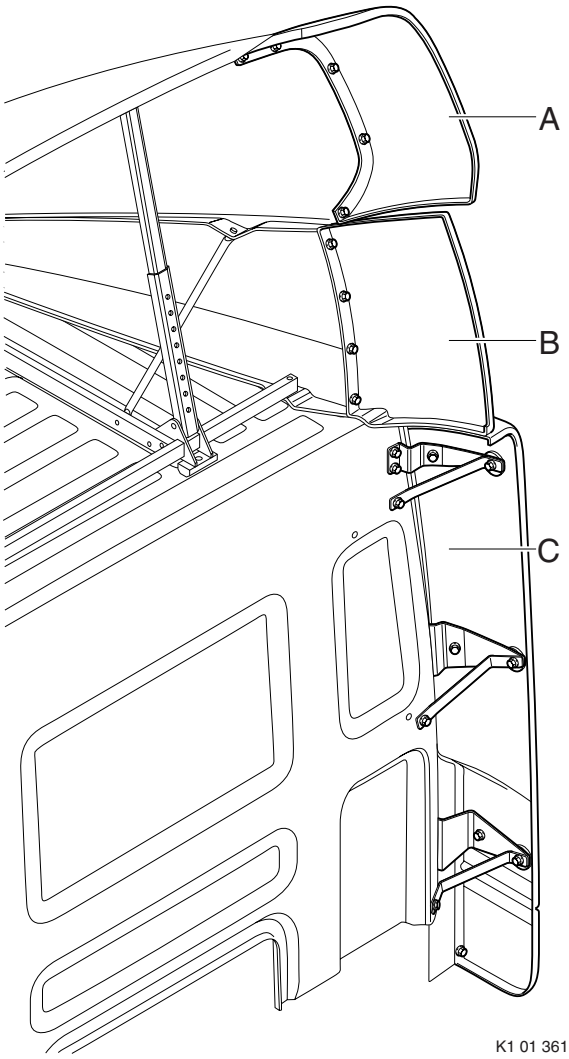
Note:
Take care not to damage the paint. Repair any damaged paint using the right type of paint.

Removing roof spoiler extension pieces combined with fenders

1. Remove the attachment bolts from the upper fender (A) and remove the fender from the roof spoiler.
2. Remove the attachment bolts from the middle fender (B) and remove the fender from the roof spoiler.
3. Remove the attachment bolts from the lower fender (C) and remove the fender from the cab.

Installing roof spoiler extension pieces combined with fenders

1. Fit the lower fender (C) to the cab, using the attachment bolts.
2. Fit the middle fender (B) to the cab, using the attachment bolts.
3. Fit the upper fender (A) to the cab, using the attachment bolts.



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Removing roof spoiler extension pieces combined with fenders (cab with raised roof)

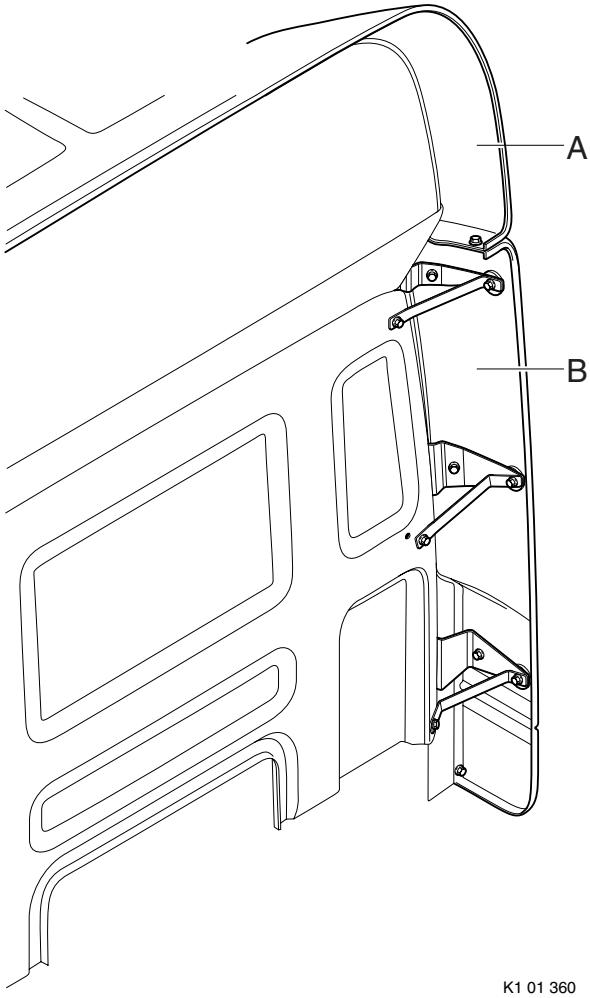
1. Remove the attachment bolts from the upper fender (A) and remove the fender from the roof spoiler.

2. Remove the attachment bolts from the lower fender (B) and remove the fender from the cab.

Installing roof spoiler extension pieces combined with fenders (cab with raised roof)

1. Fit the lower fender (B) to the cab, using the attachment bolts.

2. Fit the upper fender (A) to the cab, using the attachment bolts.



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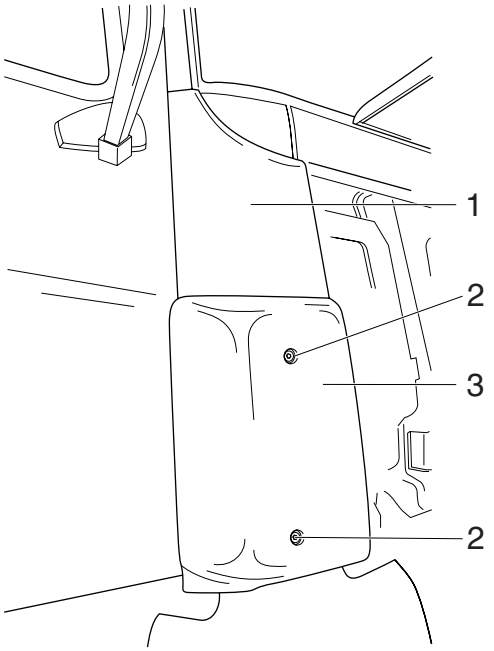
3.5 REMOVAL AND INSTALLATION, CORNER SPOILER

Removing corner spoiler

1. Open the grille and remove the corner piece (1).
2. Remove the attachment screws (2) and remove the corner spoiler (3) from the corner piece.

Installing corner piece

1. Fit the corner spoiler (3) to the corner piece (1)
2. Fit the corner piece (1) and close the grille.



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3.6 REMOVAL AND INSTALLATION, SUN VISOR ASSEMBLY

Removing sun visor assembly, day/sleeper cab

1. If fitted, remove the spotlights.
2. Remove the attachment bolts from the marker lights.
3. Remove the attachment bolts from the brackets and remove the sun visor complete with brackets from the cab roof.

Installing sun visor assembly, day/sleeper cab

1. To fit the sun visor stress-free, loosen the attachment bolts fastening the plastic hood to the brackets a few strokes.
2. Fit the sun visor complete with brackets to the cab roof and fit the attachment bolts with the plastic washers.
3. Tighten the attachment bolts fastening the plastic hood to the brackets.
4. Fit the attachment bolts of the marker lights.
5. If present, fit the spotlights.

Removing sun visor assembly (cab with raised roof)

1. If fitted, remove the spotlights.
2. Remove the attachment bolts from the brackets and remove the sun visor complete with brackets from the cab.

Installing sun visor assembly (cab with raised roof)

1. To fit the sun visor stress-free, loosen the attachment bolts fastening the plastic hood to the brackets a few strokes.
2. Fit the sun visor complete with brackets to the cab and fit the attachment bolts with the plastic washers.
3. Tighten the attachment bolts fastening the plastic hood to the brackets.
4. If present, fit the spotlights.

3.7 REMOVAL AND INSTALLATION, SPOTLIGHTS COMPLETE WITH BRACKET

Removing spotlights complete with bracket

1. Detach the connector behind the spotlight bracket.

2. Remove the attachment bolts from the bracket and remove the bracket complete with spotlights from the cab roof.

Installing spotlights complete with bracket

1. Fit the bracket with spotlights to the cab and fit the attachment bolts with the plastic washers.

2. Fit the connector.

3. Check that the cable duct through the cab roof is water-tight. If necessary, seal the passage again.

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3.8 REMOVAL AND INSTALLATION, AIR HORN

Removing air horn on roof spoiler

1. Remove the attachment bolts from the air horn and remove the air horn from the roof spoiler.

Note:
If, after removal of the attachment bolts, the air horn cannot be removed from the spoiler, the air horn has been retrofitted as an accessory. In this case, detach the air pipe on the inside of the spoiler.

Installing air horn on roof spoiler

1. Fit the air horn to the roof spoiler using attachment bolts.

Removing air horn on roof

1. Remove the attachment bolts from the air horn and remove the air horn from the roof.

Note:
If, after removal of the attachment bolts, the air horn cannot be removed from the roof, the air horn has been retrofitted as an accessory. In this case, remove the headlining to disconnect the air pipe.

Installing air horn on roof

1. Fit the air horn to the roof using attachment bolts.

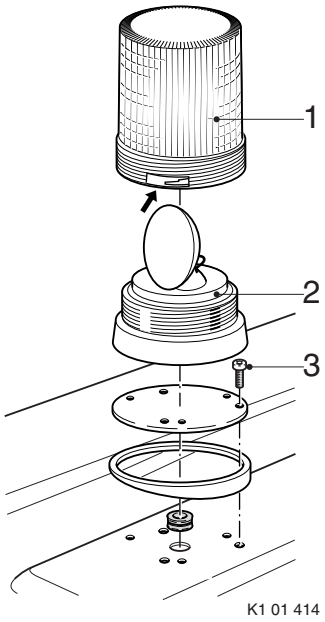
3.9 REMOVAL AND INSTALLATION, ROTATING BEACON

Removing rotating beacon

1. Remove the glass (1) of the rotating beacon by pressing the locking clip at the bottom of the glass and turning the glass counterclockwise out of the lamp socket (2).
2. Loosen the connector.
3. Remove the three attachment bolts (3) and remove the lamp socket from the roof.

Installing rotating beacon

1. Fit the lamp socket (2) to the roof and tighten the attachment bolts (3).
2. Fit the connector.
3. Turn the glass (1) of the rotating beacon clockwise onto the lamp socket (2). Continue turning the glass until the locking clip 'clicks' into the lock.



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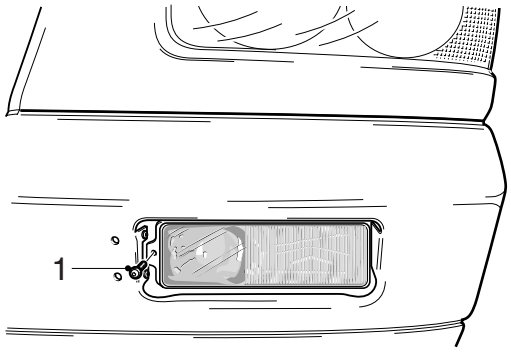
3.10 REMOVAL AND INSTALLATION, COMBI-LIGHT

Removing combi-light

1. Remove the combi-light connector.
2. Remove the attachment screw (1) and take the combi-light out of the bumper.

Installing combi-light

1. Fit the combi-light with attachment screw (1) into the bumper.
2. Fit the combi-light connector.



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3.11 REMOVAL AND INSTALLATION, 2nd BUNK

Removing 2nd bunk, sleeper cab

1. Remove the mattress and the bunk shelf from the bunk frame.
2. Remove the attachment bolts of the clamp belt from the cab roof.
3. Remove the attachment bolts of the bunk hinges from the cab rear wall and remove the bunk.

Installing 2nd bunk, sleeper cab

1. Install the bunk and tighten the attachment bolts of the bunk hinges to the cab rear wall.
2. Fit the attachment bracket of the clamp belt in the cab roof using the attachment bolts.
3. Fit the bunk shelf and the mattress in the bunk frame.

Removing 2nd bunk (cab with raised roof)

1. Remove the mattress and the undermattress from the bunk frame.
2. Remove the attachment bolts of the clamp belt from the cab roof.
3. Remove the sealing plugs and the attachment bolts of the bunk supports from the cab rear wall and remove the bunk from the cab.

Installing 2nd bunk (cab with raised roof)

1. Place the bunk in the cab and fit the attachment bolts and sealing plugs of the bunk supports in the cab rear wall.
2. Fit the attachment bracket of the clamp belt in the cab roof using the attachment bolts.
3. Fit the mattress and the undermattress in the bunk frame.

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1. SAFETY INSTRUCTIONS

1.1 SAFETY INSTRUCTIONS

You can stop the cab tilting forward at any time by turning the cock to the reverse tilting position.

If the vehicle has been involved in a collision, the cab must under no circumstances be tilted without due precautions. The internal mechanism of the lifting cylinder may have been damaged to such an extent that the cylinder is no longer locked by the internal stop collar. In that case there is a danger of the cab no longer being held back and falling forward to the ground.

When working on a tilted cab (for example when welding, spray-painting or applying bitumen coatings), be sure to cover the piston rod of the lifting cylinder. Welding spatter and paint on the piston rod will inevitably cause damage to the oil seal.

Ensure that there is sufficient ventilation during spraying and ML treatment.

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2. GENERAL

2.1 GENERAL

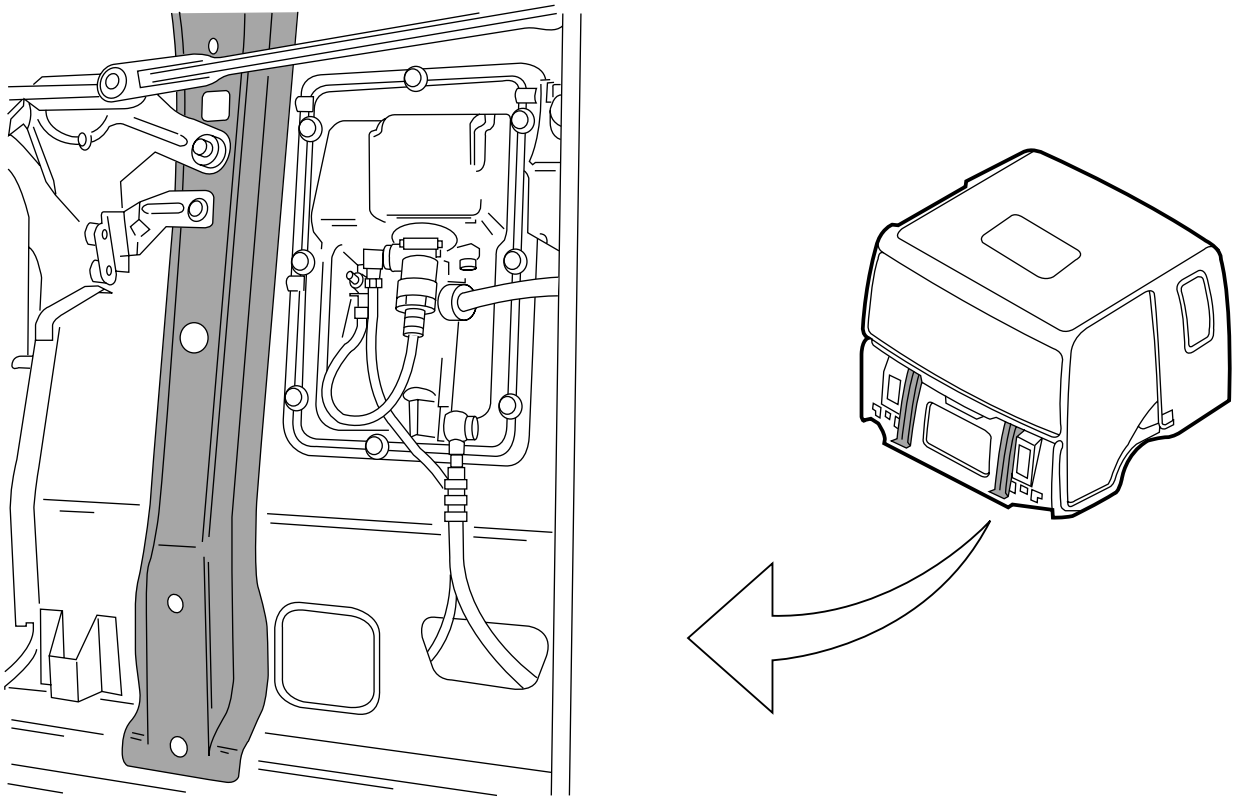
Introduction
PREWAX is a transparent, odourless, non-toxic mixture of various types of wax and corrosion-inhibiting chemicals which is vapour-sprayed into all corrosion-sensitive areas.

It penetrates all seams and adheres to all surfaces where it combines electrochemically with the metal.
PREWAX does not drip, so there is no fouling of the cab and floor. It can be sprayed without difficulty into all cavities if the DAF equipment is used. The equipment does not need to be cleaned.

2.2 NOTES ON RE-TREATMENT

- Thoroughly stir the PREWAX before use.
- For optimal treatment, the temperature of both the cab and the PREWAX must be 20°C.
- All holes required for re-treatment are already present in the cab.
- Treat cavities with a minimum pressure of 6 bar.
- After treatment of seams and hinges, reduce the air pressure to 3 bar (ideal pressure).
- Make sure to re-install the ML plugs after treatment.
- Store the flexible spray pipe by hanging it in vertical position.
- Ensure that the area is properly ventilated during treatment.
- Use the ultraviolet light to check whether the PREWAX has been applied properly.

2.3 TREATMENT OF THE CAB FRONT



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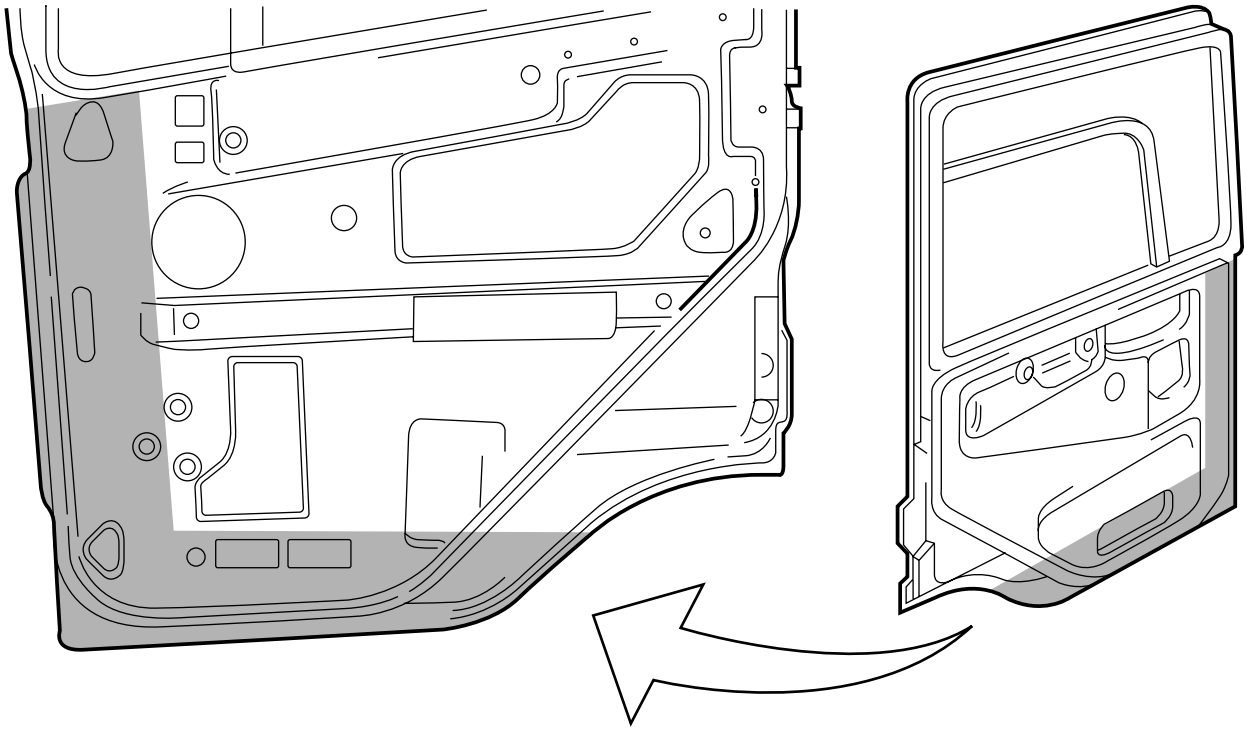
Treat the front of the cab through the existing openings.

2.4 TREATMENT OF THE DOORS



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Remove the door upholstery and treat the door as indicated in the illustration.

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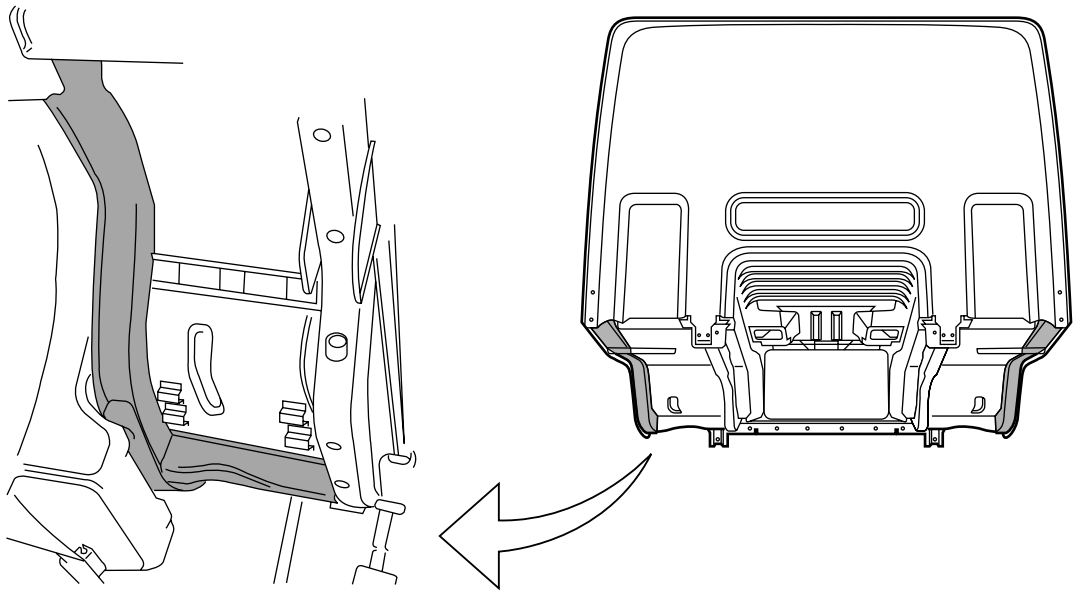
2.5 TREATMENT OF THE CAB BOTTOM



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Treat the stepwell box girders through the existing openings.

Note:
Cover the lifting cylinder piston rod.